

Iowa's Pay-for-Performance and Career- Ladder Pilot Program: External Evaluation Final Report

March 2010

**Cortney Rowland
Melissa Brown-Sims
Ellen Cushing
Trisha Hinojosa, Ph.D.
David Manzeske, Ph.D.
Andrew Swanlund, Ph.D.**

Submitted to:
Dianne Chadwick
Iowa Department of Education
400 E. 14th Street
Des Moines, Iowa 50319



1120 East Diehl Road, Suite 200
Naperville, IL 60563-1486
800-356-2735 • 630-649-6500
www.learningpt.org

Copyright © 2010 Learning Point Associates. All rights reserved.

4376_3/10

Contents

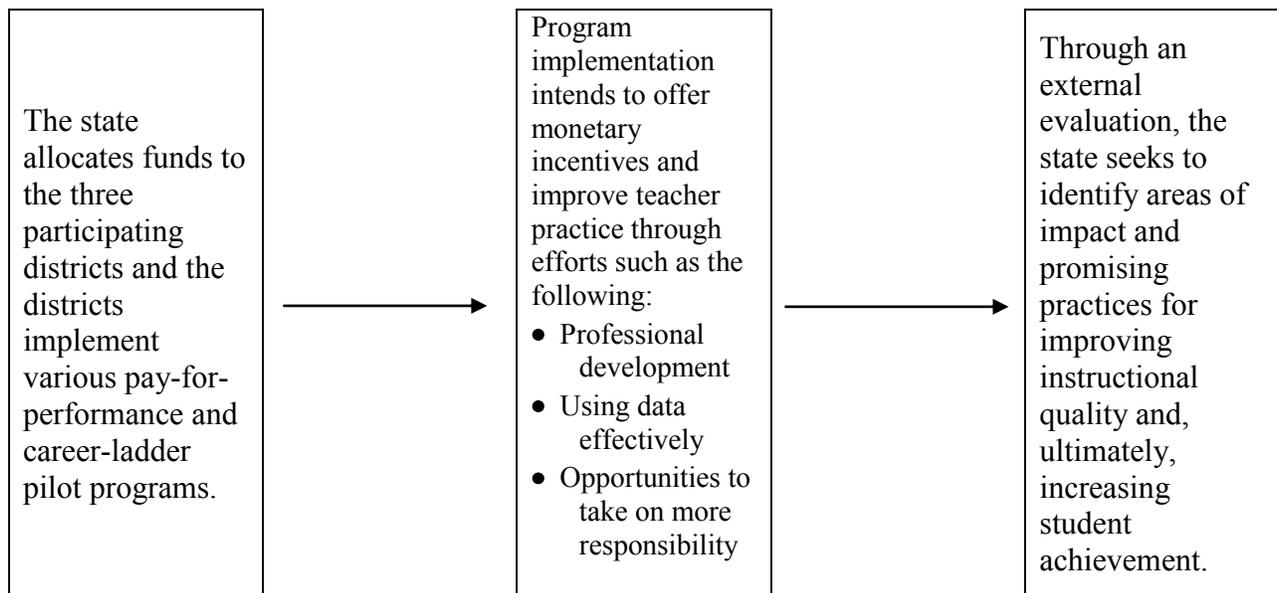
	Page
Introduction	1
Policy History	2
Synopsis of the Pilot Projects	4
Evaluation Plan	9
Research Questions	9
Methods Overview	9
Findings	15
Research Question 1A: <i>What is the benefit of the pay-for-performance and career-ladder pilot programs?</i>	15
Research Question 1B: <i>What is the cost-effectiveness of the pay-for-performance and career-ladder pilot programs?</i>	24
Research Questions 1A, 2, and 3 Using a Case Study Cross-Case Analysis	28
Summary	33
References	37
Appendixes	38
Appendix A: Technical Appendix—Teacher and Administrator Survey Methods	38
Appendix B: Technical Appendix—Student Achievement Data Analysis	42
Appendix C: Case Study Framework	58
Appendix D: Technical Appendix—Cost-Effectiveness Analysis	60
Appendix E: Administrator Survey—Tables and Findings	63
Appendix F: Teacher Survey—Tables and Findings.....	91
Appendix G: Case Study of the Mount Pleasant Community School District Pay-for-Performance Program	113
Appendix H: Case Study of the MOC–Floyd Valley Pay-for-Performance and Career-Ladder Programs	122
Appendix I: Case Study of the Cedar Rapids Career-Ladder Program	135

Introduction

Like many school districts and states around the country, Iowa recently decided to experiment with educator compensation reform to see what might work in the context of their state and its school districts. In 2007, the 82nd Iowa General Assembly passed Senate File (S.F.) 277 (2007). The law called for a “process by which select Iowa school districts research, develop, and implement projects designed to identify promising practices related to enhanced teacher compensation career ladders and performance pay models” (S.F. 277, 2007). The legislation also required an external evaluation of the implementation of these career-ladder and pay-for-performance projects. Learning Point Associates, an Illinois-based nonprofit educational research and professional services organization, was contracted to do this evaluation work.

Learning Point Associates characterizes the theory of action for the entire pilot program initiative in Figure 1 below. By allocating funds for districts to implement various forms of alternative compensation and then evaluating those initiatives, the state hopes to isolate which program types or components of programs have a positive impact on instructional quality and student outcomes.

Figure 1. Theory of Action for Iowa’s Pay-for-Performance and Career-Ladder Pilot Program Initiative



This is the final report that Learning Point Associates will deliver as part of its evaluation. The report has four sections: (1) an introduction, which includes a policy history and a synopsis of the three pilot programs; (2) a discussion of the evaluation plan, including an overview of the methods used to collect and analyze data; (3) a presentation of findings across research questions; and (4) a summary.

Policy History

Iowa legislators and educational leaders have considered educator pay reform strategies for several years. For example, the Student Achievement and Teacher Quality (SATQ) Program was established in 2001—this program, among other things, increased teacher salaries across the state of Iowa and outlined a career-ladder program intended to pay teachers higher salaries for acquiring knowledge and skills. In addition, in 2006, a Teacher Pay for Performance Commission was created by the Iowa legislature to design and implement a pay-for-performance program and provide a study relating to teacher and staff compensation structures containing pay-for-performance components. The Pay for Performance Commission contracted with the Institute for Tomorrow’s Workforce (ITW) to complete the study.

The state’s latest attempt to experiment with a strategy for educator compensation reform reflects a gradual, phased-in approach. S.F. 277 outlined that the career-ladder and pay-for-performance work should be done in two phases:

1. A planning year to take place between July 2007 and June 2008
2. An implementation year to take place between July 2008 and June 2009

This Learning Point Associates evaluation focuses on the second phase—implementation. As noted above, select Iowa school districts could research, develop, and implement a career-ladder program, a pay-for-performance program, or both. The legislation stipulates that a pay-for-performance commission should initiate planning year pay-for-performance pilots for Iowa school districts and then select two of those pilots for implementation for the 2008–09 school year. In addition, the legislation outlines that the Iowa Department of Education take the lead on establishing and administering up to eight planning and implementation career-ladder pilots. In other words, the state sought to have ten planning and implementation pilots, two that were pay-for-performance designs and eight that were career-ladder designs.

Definitions of Career Ladder and Pay-for-Performance

Career Ladder: *Career-ladder* programs award teachers for taking on additional professional roles and responsibilities.

Pay for Performance: *A pay-for-performance* program awards teachers for teacher or student performance.

S.F. 277 has an interesting record in the Iowa legislature that is worth describing as a pretext to the content of this report. On April 24, 2007, S.F. 277 was sent to Governor Chet Culver’s desk for signing (Iowa General Assembly, 2007a, p. 33). On April 26, 2007, Governor Culver line-item-vetoed the bill, notifying the legislature that he was unable to sign the legislation because there was language in the bill stating that upon completion of the pilot projects and contingent on sufficient funding, the successful components of the pilot projects would automatically be implemented at the state level (Iowa General Assembly, 2007b, pp. 24–25).

Governor Culver did not want these pilot projects to automatically scale up to a state-level program once they were complete. Rather, he preferred that the state assess the effectiveness of the programs at the local level before making decisions about what might work for the state. After this line-item veto, Governor Culver signed the legislation on the same day, April 26, 2007. Therefore, the results of the evaluation are intended to be useful for future decision-making on educator pay reform in Iowa.

Despite the fact that S.F. 277 sought to create 10 pilot projects—two pay-for-performance and eight career-ladder programs—only three school districts applied for planning year funds in October 2007. One of the school districts, Cedar Rapids, applied to plan a career-ladder program. Another district, Mount Pleasant, applied to plan a pay-for-performance program. The third school district, MOC–Floyd Valley, applied to plan a hybrid program with both career-ladder and pay-for-performance components.

The funding originally slated for the pilot projects in S.F. 277 changed over time. S.F. 277 allocated \$1 million for the planning year and \$2.5 for the implementation year. Because only three districts applied for planning grant funds, not all the \$1 million from S.F. 277 was used for planning (actual amounts allocated for planning grants are given later in this report). Then, in May 2008, the governor signed House File (H.F.) 2679 (2008), which reduced the amount of money allocated for the implementation year to \$335,000. A contact at the Iowa Department of Education mentioned that, at the time, the state thought that the budget for the three districts for the implementation year was going to be the amount of money left over from the \$1 million allocated for the planning year (approximately \$825,000) in addition to the \$335,000 allocated in H.F. 2679. When the state released the request for proposal (RFP) for the implementation year in June 2008, however, the exact amount of money available to the eligible districts was undecided, so the state did not specify the amount in the RFP. Only the three districts that received funds for the planning year—MOC Floyd Valley, Cedar Rapids, and Mount Pleasant—were eligible to apply for implementation year funding. When the three eligible districts submitted their implementation proposals, the requested amount exceeded the amount that the state had just recently decided to provide for the implementation phase of the three districts' pilot programs. Because there were only three implementation pilots, down from the original 10, the state wanted the districts to implement the three pilots with an amount of money proportional to what they would have received had there been 10 actual pilots. Therefore, the state then requested revised proposals from the three districts. The three districts primarily used two methods to reduce the costs outlined in their original proposals: (1) decreased the bonus amounts to be paid out to the participating teachers and (2) changed the scope of work. Details about the requested budgets for the three pilots as well as details of their pilot projects are discussed below.

The Iowa Department of Education facilitated the process to choose the three pilots and have since stepped back and allowed the pilot programs to operate on their own. The department sought approval from the Iowa Pay for Performance Commission on the pay-for-performance proposals and confers with the commission on the funding.

Synopsis of the Pilot Projects

Below is a synopsis of the three pilot projects. More information about each program are in the case studies located in Appendixes G (Mount Pleasant), H (MOC–Floyd Valley), and I (Cedar Rapids).

As previously mentioned, in October 2007, all Iowa districts were permitted to respond to an RFP to research, study, and develop pilots designed to identify promising practices related to enhanced teacher compensation career-ladder models or pay-for-performance models. Three districts responded to this RFP:

1. Cedar Rapids Community Schools
2. MOC–Floyd Valley Community School District
3. Mount Pleasant Community School District

The three districts received the following amounts for the 2007–08 planning year:

Table 1. Funding by District for 2007–08 Planning Year

School District	Funds Received for Year 1— Planning
Cedar Rapids Community Schools	\$64,936.00
MOC–Floyd Valley Community School District	\$43,455.60
Mount Pleasant Community School District	\$62,542.00
Total	\$170,933.60

In June 2008, the three districts were eligible to respond to an RFP for pilot implementation funding. The districts had to submit a proposal describing a variety of elements in their plans for implementation. Proposals had to include a statement about collaborating with local teachers associations/unions. The districts submitted two proposals, an original and then a revised version with a lower budget to accommodate the amount allowable by the state. Table 2 below outlines the original amounts requested from the three pilots for implementation and then the revised amounts that were eventually funded.

Table 2. Original and Revised Funding Amounts by District

School District	Original Amount Requested for Implementation Year	Revised Amount Requested and Awarded for Implementation Year	Difference
Cedar Rapids	\$700,000	\$449,334	\$250,666
MOC–Floyd Valley	\$250,750	\$173,000	\$77,750
Mount Pleasant	\$130,997	\$90,817	\$40,180
Total	\$1,081,747	\$713,151	\$368,596

What follows is a short description of the implementation pilot projects in the three districts.

Pilot Project in Mount Pleasant Community School District

Mount Pleasant is a school district with 2,200 students. Approximately 41 percent of the students are eligible for free and reduced-price lunch and students score in the 70th to 80th percentile on the state assessment in the second grade and in the 48th percentile on the fourth- through eleventh-grade state assessments. Mount Pleasant implemented a performance-based compensation program that used information from the Measures of Academic Progress (MAP) assessment to reward teachers. More information about this pilot program, including the extent to which the pilots respond to the research questions as well as lessons-learned, are in the Appendix G case study.

Mount Pleasant chose multiple, specialized assessments as a basis for determining teacher performance. The district liked the opportunity to use technology offered by MAP to deliver student formative assessment results regularly and to make instructional decisions based on those results. The following formative assessments were used:

- Grades K through 2: Northwest Evaluation Association's Primary Measure of Academic Progress (MAP)
- Grades 3 through 10: Northwest Evaluation Association's Measure of Academic Progress (MAP)

Final bonus calculations utilized students with both a fall and a spring score. After the fall MAP testing, students developed individual and classroom learning goals with the teachers from their fall achievement scores. The performance bonus was awarded if 60 percent or more of the students directly served by that individual teacher met their targeted growth for the school year using 2008 MAP norms. Bonuses for participating teachers were \$1,000. The pay formula was differentiated by professional specialization. For example:

- Participating self-contained elementary school teachers can earn a bonus for student growth in mathematics, reading, and language arts.
- An elementary special education teacher's bonus is based on which core areas are in the individualized education program (IEP) for each student receiving direct services from the special education teacher.
- Middle and high school teacher bonuses were based on the core subject that they taught.

In addition, teachers involved in the program participated in a professional development program that included the following:

- Fourteen hours of workshops
- Two hours of professional reading
- Forty hours of classroom implementation activities
- Several hours of reflective or project evaluation activities

The focus of the professional development is the utilization of formative assessment to move students up the learning continuum. For their full professional development participation, pilot program participants received grant-funded stipends of \$300.

Pilot Project in MOC–Floyd Valley Community School District

MOC–Floyd Valley Community School District serves more than 1,400 students. Approximately 94 percent of students in Grades 3–5 met their adequate yearly progress (AYP) goal in mathematics and reading. Further, 81.7 percent and 76.4 percent of students passed their 11th-grade mathematics and reading AYP goals. MOC–Floyd Valley implemented a hybrid program that included both a career-ladder component and a pay-for-performance component. All four of the district’s schools (two elementary schools, one middle school, and one high school) participated in the program. All teachers at the four schools, with the exception of the special education and physical education staff, participated in the incentive portion of the program. *All* staff (including special and physical education teachers) participated in some form of professional development that was offered through the program. The career-ladder piece of the program trains teachers to establish performance level descriptors (PLDs), or end-of-course learning objectives at each level of learning. In addition, teacher leaders act as mentors to new teachers in the district. The pay-for-performance piece requires teachers to set, in collaboration with their school principal, at least one specific, measurable, attainable, realistic, and timely (SMART) goal for the year. The goal must be an area that will increase student achievement. Teachers were compensated for achieving their SMART goal.

Below is a description of the career-ladder and pay-for-performance components of the MOC–Floyd Valley program. More information about this pilot program, including the extent to which the program responded to the research questions as well as lessons learned, are in the Appendix H case study.

Career-ladder components

- Mentor teachers—The district selected 15 mentor teachers to work on formative assessments and student information management systems. These mentor teachers started their work in the 2007–08 school year, but they also presented their work during professional development sessions that took place during 2008–09. Mentor teachers were paid an annual salary augmentation of \$2,000.
- Tiered lead teacher program—This part of the program has two parts and began in June 2009: (1) veteran teacher tier and (2) mentor teacher tier.
 - Veteran teacher tier: Fifteen teachers served an extended contract and participated in the following activities:
 - Formative assessment work
 - Mentoring new teachers
 - Teaching summer school or contribution to planning work for the career-ladder and pay-for-performance programs

- Mentor teacher tier: Fifteen teachers applied to participate in the mentor teacher tier in 2008–09. Approximately eight of those who applied for this part of the program were from a group of 15 teachers who conducted mentor teacher work in 2007–08. These teachers served an extended contract and participated in the following activities:
 - Mentoring new staff
 - Preparing and planning professional development days
 - Continuing research design and planning for career-ladder and pay-for-performance programs
 - Engaging in content-specific training

Pay-for-performance component

- Student achievement—Each participating teacher met with their principal to jointly establish professional learning goals that reflected student progress. Successfully meeting goals yielded a \$730 bonus.

Pilot Project in Cedar Rapids Community Schools District

Cedar Rapids Community School District serves nearly 17,000 students. The district’s Career Ladder Pilot Program was composed of the two main components listed below. More information about this district’s pilot program, including the extent to which the program responds to the research questions and lessons learned, are in the Appendix I case study.

- **Enrichment specialists.** Four teachers from within the district were recruited to be released from their main teaching assignment for the 2008–09 school year to serve as enrichment specialists at the elementary level. The district hired four full-time teachers to replace them. In their role as enrichment specialists, these teachers had the task of developing and delivering curriculum in four of the district’s elementary schools and providing release time so that regular elementary school teachers could engage in professional development and professional learning communities with their colleagues. The enrichment specialists developed curriculum that included program enhancements suggested by the regular classroom teachers, specials programs (e.g., for English language learners), or extension programs aligned with district mission and goals. Enrichment specialists received a salary augmentation of \$5,000. The district also planned to have enrichment specialists at the middle and high school levels, although these positions were intended to operate differently from the enrichment specialists at the elementary level; at the middle and high school level, the role was to serve as a department head or professional learning community lead. The enrichment specialist position at the high school level never got off the ground, although it did at the middle school level. Middle school department heads and professional learning community leads received an annual salary augmentation of \$500.
- **Professional development leads.** Every school in the district has an official teacher representative who serves as a professional development lead. Although these professional development leads were in place prior to the pilot project, funding from the pilot project allowed the district to enhance the professional development lead program in two ways:

1. Provide professional development leads with a \$500 stipend for their greater responsibilities.
2. Support professional development leads with mandatory training focused on their role.

The next section offers an overview of the Learning Point Associates evaluation plan to examine the three implementation pilots.

Evaluation Plan

S.F. 277 calls for an external evaluation of the pilot projects. Learning Point Associates used a variety of evaluation methods over the course of the one-year implementation of the three pilots to evaluate program implementation activities and outcomes. This final evaluation report provides the state with useful information to support future decision-making around the cost, benefit, impact, and utility of career-ladder and pay-for-performance programs. Below are the three research questions that guided the evaluation as well as a discussion of the approaches that Learning Point Associates used to conduct the evaluation.

Research Questions

Learning Point Associates investigated the following three research questions pertaining to the pilot projects:

1. What are the (a) *benefit* (e.g. improve instruction; positively affect student achievement; meet program goals) and (b) *cost-effectiveness* of the pay-for-performance and career-ladder pilot programs?
2. What are the strengths and weaknesses of each pilot program design?
3. How feasible is scaled implementation of the pilot modes at other sites?

To investigate these research questions, the evaluation team used the methods and data sources outlined in Table 3.

Table 3. Evaluation Methods and Data Sources by Research Question

Research Question	Evaluation Method and Data Source by Research Question
Research Question 1a	<ul style="list-style-type: none">• Teacher and administrator surveys• Analysis of student achievement data• Case studies
Research Question 1b	<ul style="list-style-type: none">• Cost-effectiveness analysis
Research Question 2	<ul style="list-style-type: none">• Case studies
Research Question 3	<ul style="list-style-type: none">• Case studies

Methods Overview

Below is a short description of the evaluation methods and data sources in Table 3. More details about evaluation methods, data sources, and data analysis are in the technical appendixes referenced in the description.

Teacher and Administrator Surveys

Learning Point Associates administered three rounds of surveys—(March and April 2009 (2008–09 school year) and September 2009 (2009–10 school year)—to participating teachers and

administrators from each of the three pilot programs (referred to as the treatment group). In addition, Learning Point Associates twice surveyed—April 2009 (2008–09 school year) and September 2009¹ (2009–10 school year—a sample of individuals from 40 Iowa schools that did not participate in the pilot programs (referred to as the comparison group). Intact group matching was employed to select the comparison schools along the following criteria: locale; total student enrollment; percentage of students who qualify for free or reduced-price lunch; student minority status; percentage of English language learners and students with proficient reading scores; and school level (elementary, middle, or high school). Copies of all surveys are in Learning Point’s second of three evaluation reports (Rowland, Brown-Sims, Cushing, Hinojosa, & Manzeske, 2009).

The purpose of the administrator and teacher surveys was to assess participants’ experiences and perspectives on pilot program implementation; teachers’ and administrators’ attitudes and satisfaction with the pilot program; and engagement in a variety of school improvement and teacher quality efforts. Survey respondents were asked about issues such as views on pay-for-performance and career-ladder programs, student achievement and data use, school culture and support, school leadership expectations, and professional development. The purpose of surveying teachers and administrators from comparison schools was to assess the potential impact of the pilot programs by comparing nonparticipant responses on a variety of domains such as teacher engagement, collaboration, and support with responses of pilot participants. Surveys included a section called “Looking back.” Evaluators incorporated these reflection questions as a way to ask survey respondents to compare current school conditions on the aforementioned domains (e.g., student achievement and data use, school culture, and professional development) with the same school conditions from the prior school year. Change in the responses to these reflection questions from year to year might indicate that the treatment from the pilot programs had an impact one way or another on the domains.

Table 4 provides details of the survey administration across all three rounds for the administrator surveys and Table 5 displays information about the teacher surveys. More information about the survey rounds is in Appendix A.

¹ In March 2009, Learning Point Associates had not yet drawn a comparison sample of schools in time for the first survey dissemination. As a result, only teachers and administrators taking part in the pilot program were asked to participate in the first survey. Learning Point Associates expanded the sample size during the second and third survey administration to include 40 comparison school districts. As a result, the comparison group of administrators and teachers were surveyed two times and the pilot program (i.e., treatment) participants received their surveys three times each.

Table 4. Administrator Survey Details: Rounds 1–3

Time Point of Data Collection	Survey Round	Overall Respondent Sample N (%)		Number of Respondents Who Completed the Survey(s) (%)	
		Pay-for-Performance and Career-Ladder Administrators	Comparison Administrators	Pay-for-Performance and Career-Ladder Administrators	Comparison Administrators
February 2009	1	11 (100%)	N/A	7 (64%)	N/A
April 2009	2	10 (100%)	45 (100%)	8 (80%)	10 (22%)
September 2009	3	10 (100%)	45 (100%)	5 (50%)	9 (20%)

Table 5. Teacher Survey Details: Rounds 1–3

Time Point of Data Collection	Survey Round	Overall Respondent Sample N (%)				Number of Respondents Who Completed the Survey(s) (%)			
		Comparison Teachers	Cedar Rapids	MOC–Floyd Valley	Mount Pleasant	Comparison Teachers	Cedar Rapids	MOC–Floyd Valley	Mount Pleasant
February 2009	1	N/A	54 (100%)	100 (100%)	27 (100%)	N/A	36 (66.6%)	49 (49.0%)	26 (96.2%)
April 2009	2	926 (100%)	54 (100%)	100 (100%)	27 (100%)	212 (22.9%)	31 (57.4%)	52 (52.0%)	23 (85.2%)
September 2009	3	926 (100%)	54 (100%)	100 (100%)	27 (100%)	181 (19.5%)	14 (25.9%)	32 (32.0%)	21 (77.8%)

A look at survey administration across all three time periods and stakeholder groups reveals the following:

- At least half of the administrators participating in one of the three pilot programs responded to each survey administration—the first survey administration yielded a 64% response rate; the second survey administration yielded an 80% response rate; and the third survey administration yielded a 50% response rate. There was much more variation for the teacher respondents from the three pilot districts. For example, the number of teacher respondents from the Cedar Rapids and Mt. Pleasant school districts steadily declined between the first and third survey round. The number of teacher respondents for the MOC-Floyd Valley school district hovered around 50% for the first two survey administrations but dropped to 32% for the third survey administration.
- The number of teachers and administrators from the comparison schools who responded to the survey stayed about the same for both the second and third round of surveys (the only survey administration for this group). For example, 22% of comparison administrators responded to the second survey administration. This percent decreased to 20% for the third round. Percentages looked similar for teachers from comparison schools with 22.9% and 19.5% responding in the second and third rounds, respectively.

Survey Limitations. Because the number of administrators at both treatment ($N = 11$) and comparison schools ($N = 45$) was small, administrator survey data is analyzed only descriptively; and no meaningful statistical inferences can be made between the two groups in this summative report from so small a sample size. Furthermore, data from these individuals is aggregated across the three programs for comparison with data from nonparticipating administrators in order to preserve respondent anonymity.

In contrast, because the teacher surveys were administered to a larger population across both treatment and comparison groups, these data will be analyzed descriptively as well as inferentially.² More information about the analysis of the survey data as well as the psychometric analysis of the teacher surveys is in Appendix A. Findings from the teacher survey compare data across individual pilot program types versus comparison schools as well as against survey rounds 1, 2, and 3.

It should be noted that individuals who responded to the surveys were not necessarily the same people over time. Although the surveys were sent to the same sample at each administration, it is possible that someone completed a survey for one round and did not complete the survey for one or both of the other rounds. Each survey respondent is given a unique identifier to guarantee respondent anonymity and so that the evaluation team is able to match survey responses over time for individual respondents. Survey completion was voluntary, although requested survey participants were offered a small monetary reward for their time in completing the survey.

² First teacher survey data will be scaled using Rasch analysis to create scale scores for the Likert-type responses. Rasch scaling combines several similar rating scale items and creates psychometrically valid and reliable scores that represent an underlying construct (e.g., school culture). These scale scores can then be used in statistical modeling such as individual growth modeling. See Appendix A for more information.

Analysis of Student Achievement Data

The general approach to analyzing student achievement data for this evaluation was to identify differences in student achievement scores between students in pilot program schools and students in matched comparison schools. In addition, student-level covariates (gender, minority status, etc.) were modeled to control for the effects of these characteristics on the outcomes of interest. Student achievement outcomes for mathematics, reading, and science were used. More information about the student achievement data analysis is in Appendix B, including a brief description of the modeling used to identify differences in student achievement between pilot programs and comparison schools, descriptive statistics of student achievement scale scores, a description of the methods to identify collinearity among covariates, descriptive statistics of student-level covariates, and a series of tables summarizing the findings from the modeling.

Case Studies

The Learning Point Associates evaluation team also developed case studies for the Mount Pleasant, Cedar Rapids, and MOC–Floyd Valley pilot programs. The case studies combined document review and qualitative data to provide a comprehensive review of each program site. The goal of the case studies is to provide an in-depth review of each of the programs from conception through implementation while also evaluating the degree to we can answer the three research questions below for each pilot design as well as across programs.

- What is the benefit of the program (Research Question 1a)?
- What are the strengths and weaknesses of the programs (Research Question 2)?
- How feasible is a scaled implementation of the pilot models at other sites (Research Question 3)?

The evaluation team developed a case study framework that outlined areas of interest for the programs. The framework begins with the state and district history with pay-for-performance and career-ladder initiatives, district organizational factors, and a review of the program operations. During this review, researchers also looked at the communication efforts, stakeholder support, and the assessments used in the programs to better understand the roles each piece played in the development of the programs. The framework concludes with a focus on the outcomes of each program, the fidelity with which the programs were implemented, and the feasibility of a scaled implementation. The case study framework is in Appendix C.

After the framework review, the framework served as a guide to develop an outline for each program. As the outline was developed, information was pulled from various sources to populate the framework with program-specific content. Information was gathered from program proposals, district websites, the Iowa Department of Education Pay-for-Performance and Career Ladder Pilot Grant interim and final reports, and the Iowa Department of Education website. In some cases, specific documents from pilot sites were requested—these included the following:

- Program PowerPoint presentations and other program documents
- Documents used to disseminate information on the program
- Meeting notes

- School district demographic information
- Testing schedules
- Budget information

Furthermore, the outline for each case study and the review of available documents allowed the evaluation team to develop a list of interviewees from each site. The team identified three types of potential interviewees for the case studies. These types were teachers, principals, and district-level administrators or association members. An interview protocol was developed for each type of interviewee and each protocol was customized for each program site. The principal and teacher protocols were sent to the primary contact in each district to verify that the interview questions were appropriate for the interviewees and the program. All nine protocols were also reviewed by the Iowa Department of Education to ensure relevance, utility, and quality. A minimum of seven participants was interviewed for each program and the interviews averaged an hour in length. Table 6 outlines the types and number of interviews for each pilot program.

Table 6. Case Study Interviews Across Three Pilot Sites

Pilot District	Number of Case Study Interviews	Interviewee Types
MOC–Floyd Valley	7	District administrators, principals, and teachers
Mount Pleasant	8	District administrators, principals, and teachers
Cedar Rapids	7	District administrators, teachers ^c , association representatives, principals, and teachers

Evaluators recorded and transcribed all the interviews to ensure that the information was recorded accurately. Each case study was reviewed by a contact at the pilot site. Full case studies are in Appendix G (Mount Pleasant), Appendix H (MOC–Floyd Valley), and Appendix I (Cedar Rapids).

The evaluation team also compiled common themes across the three sites. The case study framework was aligned with the three research questions to identify areas of overlap. This cross-case analysis can be found in the Findings section that follows.

Cost-Effectiveness Analysis

The cost-effectiveness analysis was an extension of both the teacher survey analysis and the student achievement analysis in order to provide a financial estimate of the cost associated with a given program finding. Separate analyses were conducted for each of the three pilot programs. Appendix D is the detailed technical appendix outlining the cost-effectiveness procedures.

The next section provides evaluation findings from the methods and data sources just discussed.

Findings

The following section outlines specific finding across the three research questions that were deduced by the methods described in the previous section. Findings are organized by research question.

Research Question 1A: *What is the benefit of the pay-for-performance and career-ladder pilot programs?*

This section describes the extent to which Learning Point Associates addressed Research Question 1A by examining teacher and administrator survey results and student achievement data. Additional findings for Research Question 1A can be found in the cross-case analysis starting on page 29 and in the pilot program case studies in Appendixes G, H, and I.

The Iowa pay-for-performance and career-ladder pilot program was implemented to experiment with educator compensation programs or components of programs that might (1) advance teacher quality and (2) improve student achievement. To assess the benefit of the pilot programs, evaluators utilized survey data from both administrators and teachers as well as student achievement data.

- **Survey data.** The survey data that were utilized—completed two or three times by administrators and teachers at pilot program schools and matched comparison schools— included administrator and teacher demographic information, single-item responses, and scale scores corresponding to teacher surveys only.
- **Student achievement data.** Two years of student-level achievement data were utilized. The data included the most recent testing period (either spring or fall of 2009) and the preceding testing period.

Administrator survey data, teacher survey data, and student achievement data were all analyzed separately, resulting in three analyses to address the research question. That is, item-level descriptive analyses of the administrator data were analyzed alone; teacher survey data were analyzed both at the item level and by constructs (extant school-level data were incorporated into the analysis of the teacher survey constructs); and student achievement data were analyzed in concert with extant student-level data.

In the sections below, several sets of findings are presented for Research Question 1A. First, descriptive findings related to administrator data are presented, followed by both descriptive and inferential findings from the teacher survey. Finally, results from the statistical modeling of the student achievement analysis are presented.

Summary of Findings From the Administrator Surveys for Research Question 1A

Surveys aimed to assess treatment principals' attitudes toward and satisfaction with the pay-for-performance and career-ladder pilot programs as well as comparison principals' attitudes toward and satisfaction with several components of the implementation and intended outcomes of the

pilot programs that may or may not be evident at comparison schools where pilot programs did not take place. Tables corresponding to the findings are in Appendix E.

Views Pertaining to Pay-for-Performance Programs. Administrators participating in the MOC–Floyd Valley, Cedar Rapids, and Mount Pleasant programs as well as the matched comparison groups were asked about their perspectives on a variety of pay-for-performance related issues. Findings from across all surveys indicate that from the perspective of both groups of school principals, having a pay-for-performance program is *not* a priority for their schools. For example, among pilot administrators, 6 of 8 administrators in survey round one and 6 of 7 in round two stated they disagreed or strongly disagreed with the statement that “~~h~~aving a pay-for-performance program in my school is a priority.”

Moreover, looking across all survey rounds, survey findings indicate that administrators overwhelmingly believe that teachers within their schools would not be supportive of having a pay-for-performance program implemented. For example, 7 comparison administrators and 2 pilot administrators from the second survey stated they strongly disagreed with the statement but no administrators across the same time period and survey groups indicated very strong support among their faculty. Similar levels of nonsupport were found in other survey rounds.

Views Pertaining to Career-Ladder Programs. Administrators were asked about their level of support for career-ladder programs. Among both the pilot and comparison groups, there was more overall support for a career-ladder program than for a pay-for-performance program. Administrators in all three survey rounds expressed higher degrees of agreement with wanting to see a career-ladder program in their schools. For example, in round two all 8 pilot administrators stated that they either agreed or strongly agreed with the statement that “~~h~~aving a career ladder program in my school is a priority.” Comparison administrators, on the other hand, were almost evenly split across both survey rounds in their level of agreement and disagreement with wanting a career-ladder program in their schools. For example, 4 principals in the third round stated that they strongly disagreed or disagreed with this statement but 5 stated they agreed.

Notwithstanding, administrators also believe that teachers within their schools would be supportive of having a career-ladder program implemented. For example, all 7 pilot administrators that completed the April survey stated they strongly agreed or agreed with the statement that read “~~T~~here is support from teachers in my school to implement a career ladder program.”

Use of Student Achievement Data. Student achievement data can be used to improve instruction and identify struggling students. The pilot programs intended to improve the targeted use of student achievement data for improvements in instruction. Administrators from both the comparison and pilot district sites were asked to describe the extent to which they work collaboratively with teachers to use student achievement data to improve a variety of school-related issues.

When it comes to building knowledge about the use and purpose of student achievement data, all principal respondents noted that they engaged in this activity to a moderate or great extent. This finding is consistent across all three rounds. Other activities that administrators engaged in to a

moderate extent or to a great extent were identifying struggling students, assigning students to classes or groups, identifying and correcting gaps in the curriculum, identifying areas of improvement for teacher instruction, and setting school improvement goals. For example, the use of student achievement data to set improvement goals was identified by both pilot and comparison school administrators as an activity that they engaged in greatly. In survey round two, 7 of 8 pilot administrators and 7 out of 10 comparison administrators selected this response option. Moreover, only 1 comparison administrator from survey round three (September 2009) responded that she or he does not use student achievement data to identify and correct gaps in the curriculum. The remaining respondents from both the comparison ($n = 8$) and the pilot ($n = 5$) groups noted that they engaged in this activity to a moderate or great extent.

School Culture and Support. To assess school culture and support, administrators were asked the extent to which they agreed or disagreed with several statements. Principals were asked about the level of trust and mutual respect, collegiality among faculty, weekly time for teacher meetings and collaborations, the frequency of communication and feedback between themselves and their faculty, and opportunities for the staff to collaborate and fix school-related problems and issues. All these indirectly reflect goals across the three pilot programs.

When asked across the survey administrations whether there is an atmosphere of mutual trust and respect among faculty and staff in the school, the majority of administrators in both the comparison and pilot districts agreed or strongly agreed with this statement. Only two administrators—both from the pilot sites in survey rounds one and three—indicated that such was not the case at their schools. Furthermore, when asked whether they provide weekly meetings for faculty collaboration, 19 out of the 20 pilot administrators who took part in one of three surveys stated they agreed or strongly agreed with the statement. Likewise, 16 out of the 19 comparison administrators who completed one of the last two surveys responded in kind. Going in hand with feelings of trust and respect, respondents were asked whether they agreed or disagreed with the statement that their schools fostered collegiality among faculty. None of the comparison administrators at either of the two survey time points noted that this was a problem or concern at their schools. In contrast, 4 pilot administrators (2 in round one, 1 in round two, and 1 in round three) stated they disagreed with the statement.

School Leadership Expectations. To assess how or whether principals set expectations for their schools, administrators were asked to rate the extent to which they agreed or disagreed with an assortment of activities related to establishing school-level expectations. Irrespective of survey group or round, all but 2 administrators from the first round either agreed or strongly agreed that they engaged in the following activities: articulating a clear vision; building consensus among all members of the school community around a shared vision; setting high standards for all teachers, establishing high academic standards for all students, and setting clear goals.

Professional Development. All administrators from both the pilot and comparison schools noted high levels of agreement (i.e., strongly agree or agree) with the belief that their school's professional development activities are useful to their teachers. For example, looking across all survey administrations, with the exception of 1 pilot administrator, all administrators stated they agreed or strongly agreed with the following statements: professional development opportunities allow teachers to work on aspects of their teaching that need improvement; and professional

development opportunities provide teachers with time to learn about evidence-based practices. Improved, targeted professional development was an intended goal for the pilot programs as a key element in improving instructional quality.

When asked whether there are sufficient resources at the school to allow teachers to participate in professional development activities, 10 of 20 pilot administrators across three survey rounds and 4 of 19 comparison administrators indicated that they disagreed with this statement. Moreover, 3 pilot administrators (from survey rounds one and three) noted they strongly disagreed with the statement. Despite this, at least 50 percent of all administrators across both survey group types indicated their schools had sufficient resources.

Finally, when asked about their level of satisfaction with the professional development that their teachers receive, administrators from the three pilot sites reported being satisfied or very satisfied. For example, in the April survey, 7 pilot administrators and 8 comparison administrators reported being satisfied or very satisfied. Only 2 pilot administrators from the first and second round indicated that they were somewhat dissatisfied.

Looking Back. During each survey administration (February, April, and September 2009), respondents were asked to rate the extent to which they agreed or disagreed with several statements related to how various school-related activities or initiatives have (or have not) improved over the prior academic school year. Findings from the all three surveys are as follows:

- As a whole, each administrator group (pilot and comparison) reported at each survey administration that they strongly agreed or agreed that their schools had improvements over the year prior in student engagement, more frequent use of student achievement data by teachers to inform decision making, and higher levels of satisfaction with professional development activities among teachers.
- When asked whether students standardized test scores have improved at their schools in contrast to the year prior, 6 (out of 15) pilot administrators from the first and second survey time points noted that their schools' standardized tests scores had not improve since 2007–08.
- When asked to reflect on the 2008–09 year in round three, 3 principals noted no improvement in students' standardized test scores. Likewise, administrators in the comparison group also indicated disagreement with the statement (round two: $n = 1$; round three: $n = 4$) that “students' standardized test scores have improved at my school.” Most administrators across both survey groups, however, noted improvement in student test scores from year to year.

Descriptive Findings From the Teacher Surveys for Research Question 1A

Teacher surveys aimed to assess treatment (i.e., pilot) teachers' perceptions about and satisfaction with the pay-for-performance and career-ladder programs as well as comparison teachers' perceptions of and satisfaction with several school characteristics associated with the intended goals and outcomes of the pilot programs. Therefore, the responses to these survey questions relate to Research Question 1A about the benefit of the pilot projects. As mentioned in

the Methods Overview and as further described in Appendix A, teacher survey data were analyzed both descriptively and inferentially.

We first present below findings for the survey data that were analyzed descriptively. Following that are findings for the survey data that were analyzed inferentially. Tables describing demographic information from teacher survey respondents as well as tables corresponding to the findings discussed below can be located in Appendix F.

Three teacher survey questions were analyzed descriptively. The first question pertains to teachers' use of student achievement data in a variety of collaboration and instructional improvement efforts. The second teacher survey question asked the extent to which respondents were or were not satisfied with their professional development activities. The final teacher survey question analyzed descriptively asked pilot and comparison teachers' views about the extent to which collaboration exists at their schools.

Student Achievement Data Use. Teachers from both the comparison and pilot district sites were asked to describe the extent to which they use student achievement data to work collaboratively with their teachers to address a variety of school-related issues. The ability to use student achievement data by school teachers is integral to their capacity to help identify gaps in student learning as well as how to use that information to improve their instruction. Further, all three pilot programs sought to improve upon this effort through program implementation.

- **Identify struggling students.** An overwhelming majority of teachers across the four groups (comparison, Cedar Rapids, MOC–Floyd Valley, and Mount Pleasant) indicated that they used student achievement data to identify individual students who need assistance to a great extent. This was consistent across all survey administrations. For example, 76 percent of teachers at MOC–Floyd Valley and Mount Pleasant district and 85 percent of Cedar Rapids teacher respondents from the second round agreed to a great extent. This pattern of responses was also present across 76 percent of comparison teachers.
- **Assign students to classes or groups.** The extent to which teachers used student achievement data to help assign students to classes or groups varied across survey rounds and districts. For example, between 17 to 28 percent of teachers from Cedar Rapids, MOC–Floyd Valley, and Mount Pleasant in round two stated they took part in this activity only minimally. In contrast, between 21 and 48 percent of teachers in the same round stated they used data to inform their assignment decisions a “great extent.” No more than 4 percent of teachers across the district sites and survey rounds stated that they did not engage in this activity. Teachers from the comparison district also showed similar results with 36 percent of respondents (in round two) stating they used achievement data to assign students to groups to a great extent.
- **Identify and correct gaps in the curriculum.** Looking across all survey administrations, approximately 34 to 64 percent of teachers indicated that they use student achievement data to identify and correct gaps in their curriculum to a “moderate” extent. For example, in round three 35 percent of teachers in MOC–Floyd Valley, 57 percent of Mount Pleasant, and 64 percent of Cedar Rapid teachers identified with this statement. Only a

small percentage of teachers—ranging from 4 percent to 23 percent across the three surveys—stated they engaged in this activity only to a minimum extent.

- **Identify areas of improvement for teacher instruction.** Across the two survey time points, teachers in the comparison group (80 percent in round two and 90 percent in round three) indicated that they used student achievement data to improve their teaching instruction to a moderate or great extent. Similar results were found across the three pilot sites and survey rounds, with 80 to 98 percent of teachers indicating this pattern of response.
- **Set school improvement goals.** The use of student achievement data to set improvement goals was identified by both pilot site and comparison school teachers as an activity that they engaged in either to a moderate or a great extent. For instance, in round three, 89 percent of comparison teachers, 93 percent of teachers from MOC–Floyd Valley and Cedar Rapids, and 100 percent of Mount Pleasant respondents selected one of these two response options. There were a small percentage of teachers (between 4 to 15 percent in survey round two, for example) who stated that they used achievement data to set school achievement to a minimum extent.

Satisfaction With Professional Development Opportunities. Professional development to support the alternative compensation programs was a key goal for each of the pilot projects. In general, respondents from Cedar Rapids, MOC–Floyd Valley, and Mount Pleasant school districts reported being satisfied across all three survey rounds with the level of professional development they are currently receiving. For example, in round three, 62 percent of Mount Pleasant, 71 percent of Cedar Rapids, and 81 percent of MOC–Floyd Valley teachers selected this response option. Between 7 percent and 20 percent of this sample reported being somewhat dissatisfied with their current professional development across the same three time periods. In contrast, teachers from the comparison group had less than 50 percent of respondents from both the second and third surveys state they were satisfied with their professional development. Moreover, more than 25 percent of comparison teachers stated they were somewhat dissatisfied.

Collaboration. To assess the forms of collaboration at their schools, all teachers were asked the extent to which they agreed or disagreed with the statements that follow. Fostering collaboration among staff was a primary goal of the three pilot projects, so responses to these survey questions provide a variety of indicators giving insight into the extent to which teachers at the pilot schools and the comparison schools perceived levels of staff collaboration.

- **Collegiality Among All Colleagues.** Respondents were asked whether they agreed or disagreed with a statement that their schools fostered collegiality among their teacher colleagues. Overall, most respondents believed their schools were supportive in creating this type of working environment. For example, across the three survey administrations, more than half the teachers from Cedar Rapids (with the exception of the first round), MOC–Floyd Valley, and Mount Pleasant agreed with this statement. A similar percentage of comparison group teachers (more than 50 percent in survey rounds 2 and 3) indicated they agreed as well. Moreover, approximately a quarter of all respondents from across all four stakeholder groups and survey rounds indicated that they strongly agreed with the statement. Roughly 17 to 21 percent of teachers from Cedar Rapids and 11 to 17

percent of teachers from Mount Pleasant disagreed with notion that that their schools fostered collegiality among its teachers.

- **Build Consensus Around a Shared Vision for Change.** The need for schools to have and build consensus around a shared vision is important in that it allows for all stakeholders (teachers, principal, students, parents) to understand and know what direction the school is heading in. When asked the extent to which they agreed or disagreed with their school efforts to build consensus among stakeholders in the school around a shared vision, between 42 percent and 69 percent of all teachers surveyed agreed with this statement. For example, in round two, 50 percent of comparison teachers, 61 percent of Cedar Rapids and MOC–Floyd Valley, and 69 percent of Mount Pleasant teachers indicated they agreed. It should be noted, however, that some teachers disagreed with the statement. For instance, in round three, 20.4 percent of comparison teachers and 28.6 percent of Cedar Rapids teachers disagreed with the statement.
- **Regularly Scheduled Time for Team Meetings and Professional Collaborations.** When asked whether their schools provided regularly scheduled meetings for faculty collaboration, between 33 percent and 63 percent of teachers across the three pilot sites agreed with the statement at one of the three survey time points. For example, during the first survey, 63.9 percent of respondents from Cedar Rapids, 51 percent from MOC–Floyd Valley, and 50 percent from Mount Pleasant responded with a high level of agreement. More than 40 percent of comparison teachers responded likewise. Despite these highlights, as many as 28 percent of teachers from MOC–Floyd Valley school district in particular noted that they did not receive regularly scheduled meeting time.
- **Consistent Collaboration With Teachers to Solve School-Related Problems.** Across all survey rounds, roughly 20 percent of respondents from the comparison group and as many as 28 percent of pilot district sites stated that they disagreed with the statement that asked whether they met consistently (at least every two weeks) with their colleagues to collaborate and solve school-related problems. The vast majority of teachers across all four stakeholder groups indicated that their schools did engage in these collaborative conversations. For example, 74.2 percent of teachers in Cedar Rapids, 59.6 percent of MOC–Floyd Valley, 56.5 percent of Mount Pleasant, and 47.2 percent of comparison teachers stated they agreed with the statement during the second survey.
- **Use of Student Achievement Data to Inform Decision Making.** A high percentage of teachers ranging from 52 percent to 76 percent across the three survey rounds and pilot sites indicated that their colleagues used findings from their student achievement data to inform their decision making. For instance, 66 percent of teachers in Mount Pleasant and 71 percent of teachers in MOC–Floyd Valley in round three agreed with this statement. Nearly one third of teachers from the same district and survey round indicated strong agreement. Similarly, between 52 and 48 percent of comparison teachers in the second and third survey rounds, respectively, stated they agreed.
- **Adequate Time Provided to Meet and Collaborate With Teachers in the Same Grade or Subject Area.** Results from the surveys show great variance among teacher respondents when asked whether their schools provided them with adequate time to meet and collaborate with their colleagues in the grade level or subject area. For example, there was almost an even split between the percentages of teachers who agreed or disagreed

with statement in some districts, such as MOC–Floyd Valley (30.6 percent vs. 34.7 percent) and Mount Pleasant teachers (38.5 percent vs. 38.5 percent) in survey round one. This trend was replicated for teachers in the comparison group as well across the last two survey rounds.

Inferential Findings From the Teacher Surveys for Research Question 1A

Teacher survey scale scores were analyzed with individual growth modeling. The general approach of the modeling is to identify differences in scale scores between teachers in a particular pilot program and teachers in a comparison group. From this analysis, two findings are of interest.

1. Statistically significant ($p < 0.05$) differences in a particular teacher survey scale score between teachers in a specific pilot program and teachers at comparison schools at the final administration period (For instance, it is possible to identify whether teacher respondents from a particular pilot program scored higher on collaboration items than comparison teachers.)
2. Statistically significant associations, or interactions, between the survey group and the time of the administration (In other words, whether a change occurs—either increasing or decreasing—in the scale scores for a particular group of teachers from the first administrative period to the last.)

Cedar Rapids. There were three statistically significant scale score differences between teacher respondents at Cedar Rapids and comparison teachers; an additional scale score approached significance ($p < 0.07$).

- Teacher respondents reported more favorable views of career ladders at the final time point than comparison teachers.
- Teacher respondents reported less favorable perceptions of school culture and support at the final time point than comparison teachers.
- Teacher respondents reported less favorable perceptions of collaboration at the final time point than comparison teachers.
- Teacher respondents reported more favorable perceptions of professional development at the final time point than comparison teachers; this finding only approached significance ($p = 0.066$)

There were no statistically significant changes in scale scores from the first to the third administration of the survey for Cedar Rapids teacher respondents.

MOC–Floyd Valley. There was one statistically significant scale score difference between teacher respondents at MOC–Floyd Valley and comparison teachers; an additional scale score approached significance ($p < 0.07$).

- Teacher respondents reported more favorable views of pay-for-performance at the final time point than comparison teachers.

- Teachers' favorable views of pay-for-performance increased from the first to the third time of administration.
- Whereas teacher scale scores for views of career ladders were not significantly different from those of comparison teachers at the final time point, scale scores for program teachers decreased over time relative to those of the comparison teachers.
- Teacher respondents reported higher levels of student achievement and data use at the final time point than comparison teachers; this finding only approached significance ($p = 0.069$).

Mount Pleasant. There were two statistically significant scale score differences between teacher respondents at Mount Pleasant and comparison teachers; an additional scale score approached significance ($p < 0.08$).

- Teacher respondents reported more favorable views of pay-for-performance at the final time point than comparison teachers.
- Teacher respondents reported higher levels of professional development at the final time point than comparison teachers.
- Teacher respondents reported higher levels of school culture and support at the final time point than comparison teachers; this finding only approached significance ($p = 0.079$).

There were no statistically significant changes in scale scores from the first to the third administration of the survey for Mount Pleasant teacher respondents.

Summary of Findings From the Analysis of Student Achievement Data for Research Question 1A

In addition to analyzing administrator and teacher survey data to respond to Research Question 1A about the benefit of the pilot programs, the evaluation team analyzed student achievement data for the pilot sites and the comparison schools. Despite the fact that rigorous multiple regression modeling (discussed in further detail in Appendix B) was used to analyze the student achievement data, results should still be read with caution. The pilot programs were implemented for only one academic year (2008–09), so it may have been difficult for the programs to have any realized effect on the way students perform on standardized tests.

The general approach of the multiple regression modeling was to identify differences in standardized test scores in mathematics, reading, and science between students from schools in pilot programs and students in matched comparison schools. From this analysis, the finding of interest is whether there are statistically significant ($p < 0.05$) differences between the achievement scores of students from a particular pilot program and students attending matched comparison schools. For a more detailed description of the analysis, including all summary tables, see Appendix B. Findings related to the achievement scores are presented for each program separately.

MOC–Floyd Valley

Because every full-time, certified content-area teacher at the four participating schools was involved in the program, the three outcomes of interest are students' mathematics, reading, and science standardized test scores. There were positive associations ($p < 0.05$) between students' achievement scores in reading and science and attending a pilot program.

- There was no statistically significant association between mathematics achievement and attending a pilot school ($p = 0.133$).
- There was a positive association between students at pilot program schools and reading achievement. That is, students attending the pilot program schools had reading scores that were significantly higher than the scores of students attending matched comparison schools.
- There was a positive association between students at pilot program schools and science achievement. That is, students attending the pilot program schools had science scores that were significantly higher than the scores of students attending matched comparison schools.

Mount Pleasant

The two outcomes of interest for this pilot program are students' mathematics and reading standardized test scores. There were negative associations ($p < 0.05$) between students' achievement scores in mathematics and reading and attending a school with a pilot program.

- There was a negative association between students at pilot program schools and mathematics achievement. That is, students attending the pilot program schools had mathematics scores that were significantly lower than the scores of students attending matched comparison schools.
- There was a negative association between students at pilot program schools and reading achievement. That is, students attending the pilot program schools had reading scores that were significantly lower than the scores of students attending matched comparison schools.

Cedar Rapids

Because every full-time, certified content-area teacher at the four participating schools was involved in the program, the three outcomes of interest are students' mathematics, reading, and science standardized test scores. There were no statistically significant ($p < 0.05$) associations between students' achievement scores for mathematics, reading, or science and attending a school with a pilot program. In effect, mathematics, reading, and science scores for students attending a pilot program school were not statistically different from those students attending comparison schools.

Research Question 1B: What is the cost-effectiveness of the pay-for-performance and career-ladder pilot programs?

This section presents cost-effectiveness findings for Research Question 1B as a result of the teacher survey and student achievement analyses. To assess the cost-effectiveness of the pay-for-

performance and career-ladder pilot programs, the following three data sources were utilized: extant data, teacher survey scale scores, and student achievement data.

- **Extant data.** Districts provided Learning Point Associates with financial data associated with the total costs of their respective pay-for-performance or career-ladder pilot program and the number of participating teachers. Also, the Iowa Department of Education provided data on the number of students enrolled in each school of the pilot programs.
- **Teacher survey data.** Scale scores from the teacher survey analysis were utilized for the cost-effectiveness analysis.
- **Achievement data.** Student-level achievement data corresponding to the 2008–09 academic year were utilized for the cost-effectiveness analysis.

In the sections that follow, definitions of program cost and program effectiveness are presented, as well as an explanation of the analysis and related findings. More information about calculating cost-effectiveness for differences in teachers’ perceptions (from survey data) and for student achievement differences is in Appendix D.

Defining Cost

For the purpose of the current analysis, program cost was defined as the amount of money that each district received from the Iowa Department of Education, and in turn spent, to operate its pilot program. Each district submitted proposed program budgets to the Iowa Department of Education; as well, each district submitted final pilot program budgets to the evaluation team at Learning Point Associates. See Table 7 for a summary of the proposed and final costs associated with each pilot program.

Table 7. Proposed and Final Costs for Pilot Program Implementation

	Proposed cost	Final total cost
Cedar Rapids	\$449,134.00	\$449,334.00
MOC–Floyd Valley	\$173,000.00	\$169,996.79
Mount Pleasant	\$90,817.00	\$90,817.00

Sources: Cedar Rapids Community School District; MOC–Floyd Valley Community School District; Mount Pleasant Community School District.

To approximate program costs more accurately, the number of students attending pilot program schools and the number of participating teachers within each pilot program were also taken into consideration. See Table 8 for a summary of the number of students and participating teachers in each pilot program.

Table 8. Number of Students and Participating Teachers

	Number of Participating Schools	Number of Students	Number of Participating Teachers
Cedar Rapids	<ul style="list-style-type: none">• 4 elementary schools• 6 middle schools	1,171	100
MOC–Floyd Valley	<ul style="list-style-type: none">• 2 elementary schools• 1 middle school• 1 high school	1,309	93
Mount Pleasant	<ul style="list-style-type: none">• 1 elementary school• 1 middle school	746	26

Sources: Iowa Department of Education; Cedar Rapids Community School District; MOC–Floyd Valley Community School District; Mount Pleasant Community School District.

In turn, final total costs and the number of both students and participating teachers associated with each pilot program were used to calculate program costs for each student and participating teacher.

Table 9. Pilot Program Costs per Student and Teacher

	Cost per Student	Cost per Participating Teacher
Cedar Rapids	\$383.72	\$4,493.34
MOC–Floyd Valley	\$129.87	\$1,827.92
Mount Pleasant	\$121.74	\$3,492.96

Note: Pilot program costs were calculated by dividing the number of students or participating teachers by the final costs associated with each respective program.

Defining Effectiveness

Program effectiveness was defined as a statistically significant ($p < .05$) positive program effect. That is, two general program effects were considered for this analysis: (1) positive effects associated with any of the seven teacher survey scale scores, and (2) positive effects associated with any of the two or three student achievement outcomes. That is to say, in order to conduct a cost-effectiveness analysis, only teacher survey scale scores that were statistically higher than those of comparison teachers' were of interest. Similarly, achievement scores of students from pilot program schools that were statistically higher than students attending comparison schools were also of interest. The findings section presented six statistically significant program findings or findings of effectiveness on which to conduct a cost-effectiveness analysis. See Table 10 for a summary of the average differences for each statistically significant program effect.

Table 10. Summary of Positive Program Effects

Effect	Program effects (mean positive differences)		
	Cedar Rapids	MOC–Floyd Valley	Mount Pleasant
<i>Teacher Survey Analysis</i>			
Views of pay for performance	————	47.76	48.44
Views of career-ladder programs	31.85	————	————
Student achievement and data use	————	————	————
School culture and support	————	————	————
Collaboration	————	————	————
Professional development	————	————	34.76
Looking back	————	————	————
<i>Student Achievement Analysis</i>			
Mathematics	————	————	————
Reading	————	0.085	————
Science	————	0.12	n/a

Note: Complete model summaries associated with the program effects are in Appendix B and Appendix F.

Note: A long dash (————) indicates either a statistically nonsignificant effect or a negative effect.

Note: Science achievement differences between students at Mount Pleasant and students at corresponding matched comparison schools were not calculated.

Calculating Cost-Effectiveness

Cost-effectiveness was calculated in one of two ways according to the differences in metrics between teacher scale scores and the student achievement standard scores. Moreover, the calculation of cost-effectiveness varied as a function of the cost per teacher or the cost per pupil. Again, see Appendix B for a description of the processes used to calculate cost-effectiveness.

Estimates of Cost-Effectiveness

Below are the estimates of cost-effectiveness for differences in teachers’ perceptions and student achievement differences, respectively.

Cost-effectiveness for differences in teachers’ perceptions

- To attain an effect size of 0.1 for a perceived difference in teachers’ views of pay-for-performance, it cost the MOC–Floyd Valley pilot program \$126.84 per teacher, whereas this same difference cost Mount Pleasant \$215.68 per teacher.
- To attain an effect size of 0.1 for a perceived difference in teachers’ views of career-ladder programs, it cost the Cedar Rapids pilot program \$797.04 per teacher.
- To attain an effect size of 0.1 for a perceived difference in teachers’ perceptions of professional development, it cost the Mount Pleasant pilot program \$402.72 per teacher.

Cost-effectiveness for student achievement differences

- To attain an effect size of 0.1 for differences in students’ reading achievement, it cost the MOC–Floyd Valley pilot program \$152.79 per student.
- To attain an effect size of 0.1 for differences in students’ science achievement, it cost the MOC–Floyd Valley pilot program \$108.22 per student.

The estimated cost-effectiveness of program effects for both the teacher survey analysis and student achievement analysis are summarized in Table 11.

Table 11. Summary of Cost-Effectiveness for Program Findings

Effect	Program Effects (Mean Positive Differences)		
	Cedar Rapids	MOC–Floyd Valley	Mount Pleasant
<i>Teacher Survey Analysis</i>			
Views of pay for performance	————	\$126.84	\$215.68
Views of career-ladder programs	\$797.04	————	————
Student achievement and data use	————	————	————
School culture and support	————	————	————
Collaboration	————	————	————
Professional development	————	————	\$402.72
Looking back	————	————	————
<i>Student Achievement Analysis</i>			
Mathematics	————	————	————
Reading	————	\$152.79	————
Science	————	\$108.22	n/a

Note: A long dash (————) indicates either a statistically nonsignificant effect or a negative effect.

Note: Science achievement was not tested between students at Mount Pleasant and students at corresponding matched comparison schools.

Research Questions 1A, 2, and 3 Using a Case Study Cross-Case Analysis

This section of the report is designed to provide a cross-case analysis of the three program sites participating in the Iowa pay-for-performance and career-ladder pilot program. Evaluators developed individual case studies for each of the pilot programs (these are in Appendixes G, H, and I of this report) using document reviews and qualitative data. Evaluators then analyzed themes pertaining to the research questions across the three pilot sites. Findings for Research Questions 1A, 2, and 3 across the three pilot sites as informed by the case studies follow.

Cross-Case Analysis Findings for Research Question 1A: *What is the benefit of the program?*

Findings across the three individual pilot program case studies reveal the following areas as perceived benefits of the pilot programs among interviewees.

Teacher Collaboration. Several interviewees from the pilot sites noted that an increase in teacher collaboration was an outcome of the implementation of their respective programs. For Cedar Rapids and MOC–Floyd Valley, teacher collaboration was expressly written into their program operation. The Cedar Rapids program included professional learning communities to facilitate teacher analysis of data and discussions on instructional strategies. The MOC–Floyd Valley career-ladder component of the program allowed veteran teachers to work as mentors with beginning teachers, particularly through participation in workshops and grade-level meetings. Interviewees from the Mount Pleasant pilot program noted that an increase teacher collaboration was an unintended outcome of the program. Teachers collectively read and analyzed MAP data, which facilitated teacher collaboration.

Change in Professional Culture. Interviewees from MOC–Floyd Valley and Mount Pleasant noted a change in professional culture as a benefit of their respective programs. The Mount Pleasant program used the MAP assessment to individualize student learning. This created a student-focused culture and held each teacher accountable for individual student achievement. The MOC–Floyd Valley program established PLDs, which clearly identified what students should learn by the time they finished each course. Interviewees noted that the career-ladder component of the MOC–Floyd Valley program helped teachers to reassess what they were teaching and how they were teaching in order to have their students reach their learning objective by the end of the course. The coupling of the PLDs and the teacher accountability established a professional culture, according to interviewees, that was not previously there.

Cross-Case Analysis Findings for Research Question 2: *What are the strengths and weaknesses of each of the program designs?*

Strength: District Leadership. Although not necessarily intended as one of the goals or intended outcomes of the pilot programs, interviewees from both MOC–Floyd Valley and Mount Pleasant credit district leadership as a factor in the successful implementation of their program. For MOC–Floyd Valley, all teachers interviewed agreed that the most integral key to the success of the program was the leadership and direction of the superintendent. The superintendent frequently communicated with teachers and convened districtwide meetings. Similarly, most teachers interviewed stated that their principals had been very involved in the grade-level team meetings and were available to the staff. Interviewees from Mount Pleasant noted that district leadership played a key role in the implementation of the program. The district’s curriculum director was involved in all aspects of the program. He traveled with the planning committee and joined in their research on alternative compensation programs, participated in the development and operation of the program, and facilitated several of the professional development sessions. Further, the program required school buildings to have access to computers in order to take the MAP assessment, and supplying computers to the necessary schools was a task taken on by the

district leadership. Finally, as at MOC–Floyd Valley, district leadership facilitated a majority of the communication with teachers, union staff, and the community on the program.

Strength: Communication. Interviewees from both Mount Pleasant and MOC–Floyd Valley agreed that one of the beneficial aspects of their programs was clear and consistent communication with stakeholders. Mount Pleasant established guidepost meetings throughout the school year as open forums to address questions as well as to share program information with teachers, parents, union officials, and any other interested stakeholder. Several interviewees from Mount Pleasant cited these meetings as a successful strategy in securing teacher and union support for the program because every decision and program operation was transparent to all involved. As at Mount Pleasant, MOC–Floyd Valley convened several groups during the planning phase to obtain support, feedback, and guidance before the implementation phase of the program began. A planning committee was consulted monthly at the start of the grant to discuss any possible violations to the union contracts and to spread information about the pilot to the teachers. The superintendent also convened an administrative team that had the task of meeting with teachers to discuss the vision and design of the pilot program and determine the feasibility of implementation. To inform all stakeholders, the district disseminated information through the local district newspaper, board meeting notes, and mailings home. Teachers were informed about current and ongoing initiatives related to the project through the superintendent, school principals, and members of the tiered leader teacher program.

Strength: Enrichment Specialists. Although enrichment specialists for the elementary schools was a program component only for the Cedar Rapids school district, it is worth discussing here because every interviewee from Cedar Rapids mentioned it as program strength. Interviewees viewed the position as key to the career-ladder program. Assuming that career-ladder programs provide opportunities for teachers to take on additional professional roles and responsibilities, the four enrichment specialists who provided classroom teachers release time certainly exemplify this strength. Most interviewees cited the enrichment specialist position as a strength of the program because they provided useful release time for teachers to meet and discuss student data, teaching strategies, and other student related topics. Interviewees from Cedar Rapids also frequently commented on the fact that released teachers did not lose vital instructional time because enrichment specialists were consistent figures in their classrooms and carried out current lessons tied to school and district instructional goals. Citing these two reasons as strengths point more to the program’s ability to affect working conditions and instructional strategies and not necessarily teachers’ career ladders.

Weakness: Professional Development. All program sites noted that they needed more intensive professional development to address specific components of their programs. Interviewees from MOC–Floyd Valley noted that there was a lack of administrator training to support teachers in developing and reaching their SMART goals. Two of the administrator interviewees from that district mentioned that there was a lack of clarity on how to assist teachers in setting goals. In addition, the program originally called for a principal payout based on setting and achieving SMART goals at the principal level, but the program was unable to carry out this piece of the program. As a result, the principal professional development that would have been part of the program never came to fruition. Interviewees from Mount Pleasant also acknowledged a desire for enhanced professional development, specifically in differentiated instruction. Mount Pleasant provided professional development to teachers participating in the program in a series called

MAP 101. This was designed to assist teachers in understanding the MAP assessment, introduce strategies to analyze the data from the MAP assessment, and other activities specifically focused on the assessment. There was no professional development provided that supported teachers in using the information from the assessment to change instruction in the classroom. The district noted this as an area for improvement. Interviewees from Cedar Rapids also noted professional development as presenting a challenge. Interviewees mentioned that there was not enough professional development in implementing a professional learning community once the time became available for the released teachers.

Weakness: Universal Participation. Interviewees from both Mount Pleasant and Cedar Rapids noted a concern that not all teachers were able to participate in the pilot programs. For the first year of implementation, Mount Pleasant was urged to start small and included only two schools, an elementary and a middle school. As a result, teachers in other elementary schools heard of the depth and breadth of information available through the MAP assessment and expressed some frustration that they were unable to participate. Further, the MAP assessment is not available for all subjects and as a result, only mathematics and language arts teachers at the middle school were eligible (although all teachers at the elementary school were eligible). Cedar Rapids also mentioned the lack of universal participation as a challenge with the implementation of their program. Like Mount Pleasant, Cedar Rapids did not implement their program in all schools during the pilot year. As a result, some teachers heard about the program and were disappointed they were not given similar release time, particularly special education teachers. The district addressed this by informing nonparticipating schools that this was only a pilot year and participation might be possible in subsequent years.

Weakness: Formative Assessment. Although Mount Pleasant interviewees clearly valued the amount of information provided by the MAP assessment, they noted that the vast amount of information provided for each individual student could be overwhelming to teachers attempting to analyze it all. All interviewees agreed that the information was invaluable for improving their instruction for each student, but the data was sometimes too much to digest. MOC–Floyd Valley, however, expressed their interest in having access to a research-based formative assessment that could be used when establishing and working to achieve their SMART goals. MOC–Floyd Valley teachers were able to choose their formative assessment, such as SMART Boards or interactive whiteboards, journals, logs, and small quizzes, but they wanted access to those formative assessments that were proven to be effective with improving student achievement.

Cross-Case Analysis Findings for Research Question 3: How feasible is a scaled implementation of the pilot models at other sites?

According to most interviewees across the three pilot sites, scaled implementation of the programs is feasible; however, interviewees offered tips and cautions for other districts attempting to implement some or all of the pilot program designs. These are discussed below.

Ensure Stakeholder Buy-In. Several interviewees across the three pilot programs noted the importance of stakeholder support and buy-in to ensure program success. Interviewees from MOC–Floyd Valley mentioned that having a core group of teachers invested and supporting the program is important for sharing enthusiasm, dispelling misconceptions and garnering support

for the program. Further, several interviewees from MOC–Floyd Valley noted that frequent communication with stakeholders was an effective approach to disseminating information and facilitating stakeholder support. Mount Pleasant also used frequent communication as a strategy to build stakeholder support for their program. The regular guidepost meetings were established to accommodate various schedules as well as to act as a forum for information dissemination. Along with MOC–Floyd Valley, Mount Pleasant included a group of teachers, union leaders, and principals on the planning committee. This allowed for teachers on the planning committee to report directly back to their colleagues with any information on the program and to act as liaisons with the district to share any concerns or points of contention by teachers. Finally, all interviewees from Cedar Rapids acknowledged teacher support as necessary for the successful implementation of their program.

Leverage Current Reform Efforts or Knowledge and Experience From Other Districts.

MOC–Floyd Valley administrators noted that many districts already have some version of a tiered lead teacher program in place within their district. Instead of replicating a program already in existence or starting completely new, these districts should look to refine the program to help inform professional development practices. Despite using a template already in existence, however, administrators and teachers note that it will take a lot of time up front during the planning phases. In addition, Mount Pleasant district leaders have been in conversations with other districts in the state interested in using the MAP assessment as well as the professional development that accompanies the program.

Cost. Interviewees from both Mount Pleasant and Cedar Rapids mentioned the cost of implementing their respective programs as a potential barrier to scaled implementation. During the 2009–10 school year, Mount Pleasant will continue to scale up its use of the MAP assessment with additional schools and subjects. Although the funding to include a performance-based award to the achievement of the learning goals is no longer available, the district has noted that the information provided by the MAP assessment is so important to them that they will rework budgets in order to continue using the assessment. Cedar Rapids noted that compensating teachers for time outside their regular contract hours can be cost-prohibitive. Also, without funds from the state to implement their program, they would be forced to dip into other funding streams that are already allocated.

Summary

Over the past couple of decades the state of Iowa has experimented with several initiatives to reform the way that their educators are paid. The most recent effort was a program in which the state funded three school districts—Cedar Rapids, Mount Pleasant, and MOC–Floyd Valley—to plan and implement pay-for-performance and career-ladder pilot programs. Cedar Rapids implemented a career-ladder program, Mount Pleasant implemented a pay-for-performance program, and MOC–Floyd Valley implemented a hybrid program that included career-ladder elements as well as pay-for-performance elements.

The state funding for these pilot projects was allocated in legislation. The law also called for an external evaluation of the programs. Learning Point Associates conducted the evaluation; this report represents the third and final evaluation report submitted to the state. To conduct the evaluation, Learning Point Associates pursued three research questions focused on the benefit and cost-effectiveness of the programs, the strengths and weaknesses of the programs, and finally, the potential for scaled implementation of the programs. To examine these research questions, the evaluation team utilized a multimethod evaluation approach composed of teacher and administrator surveys (administered three times—twice during the implementation year [2008–09] and once in the fall of the following year [2009–10]), analysis of student achievement data, and case studies based on document reviews and interview data. Teacher survey and student achievement data from comparison schools were also utilized. Teacher and administrator survey questions largely focused on aspects of schooling that were indirect or direct goals or intended outcomes of the pilot programs. As a result of program implementation, the evaluation team hypothesized that schools participating in the pilots would show a positive increase over time in administrators' and teachers' perceptions about the presence and quality of characteristics described in the survey items as well as potentially more positive outcomes on the items than those respondents from the comparison schools.

Because of the small number of administrators who were surveyed both from the pilot districts (treatment group) and the comparison schools, administrator survey data was analyzed only descriptively. Therefore, administrator survey results should be read with caution and cannot be interpreted to be a result of either having or not having one of the pilot programs. Administrators from both the treatment and comparison groups seemed to favor career-ladder programs over pay-for-performance programs. Further, administrators mostly thought that their teachers would support a career-ladder program over a pay-for-performance program. Over the course of the three survey administrations, administrators from both the treatment and comparison groups mostly agreed that they use, to a moderate or great extent, student achievement data for such efforts as identifying struggling students, correcting gaps in curriculum, and setting school improvement goals. Furthermore, administrators from both groups mostly agreed that their schools' culture reflected such things as mutual trust and respect as well as collegiality among staff; more pilot administrators, however, disagreed with the statement that their school fostered collegiality among staff than did comparison administrators. Both groups of administrators across all survey administrations agreed that professional development activities for the teachers in their schools were useful. Last, when administrators were asked to reflect on the previous academic year, most agreed or strongly agreed that there were improvements in student

engagement, use of data, and levels of satisfaction with professional development activities for teachers.

Teacher survey data were analyzed descriptively and inferentially. Teacher survey data that were analyzed descriptively should be read with caution in that results do not necessarily reflect pilot program impact. Teacher survey data that were analyzed descriptively show that teachers across all survey rounds generally agreed that they use student achievement data in decision making. While treatment and comparison teachers generally responded that they were satisfied with the professional development activities at their schools, teachers from pilot districts more frequently agreed that they were satisfied with their school's professional development activities. The final teacher survey question that was analyzed descriptively focused on levels of school collaboration. While there is some variation in the way that teachers responded to the school collaboration items, teachers from both treatment and comparison schools generally responded favorably about the level of collaboration at their schools.

When analyzing the teacher survey data inferentially in order to make comparisons between the pilot and comparison sites, a few statistically significant findings emerged. For example, teachers from Cedar Rapids responded more favorably to views of career ladders at the final survey administration than did their comparison teacher counterparts (Cedar Rapids implemented a career-ladder program). Teachers in Cedar Rapids at the final survey administration reported less favorable perceptions, however, of school culture and support as well as of collaboration than did their comparison counterparts. Teachers from MOC–Floyd Valley responded with more favorable views of pay-for-performance programs at the final survey administration than did the comparison teachers (MOC–Floyd Valley implemented a hybrid career-ladder and pay-for-performance program). In addition, the MOC–Floyd Valley teachers' views of pay-for-performance increased from the first to the third time of survey administration. Finally, teachers in Mount Pleasant reported more favorable views of pay-for-performance at the final survey administration than did their comparison teacher counterparts (Mount Pleasant implemented a pay-for-performance program). Teachers in Mount Pleasant also reported higher levels of satisfaction with their school's professional development activities than did comparison school teachers at the final survey administration.

In addition to analyzing administrator and teacher survey data, the evaluation team also analyzed student achievement data for the pilot sites as well as the comparison schools. Results should be taken with caution, however—pilot programs were implemented for only one academic year (2008–09), so it may have been difficult for the programs to have any realized effect on the way students' perform on standardized tests. The general approach of the multiple regression modeling was to identify differences in standardized test scores in mathematics, reading, and science between students from schools in pilot programs and students in matched comparison schools. For MOC–Floyd Valley, there was a positive association between students who participated in that pilot program and reading achievement; scores were significantly higher than the scores of students attending matched comparison schools. Also, there was a positive association between students at MOC–Floyd Valley pilot program schools and science achievement; scores were significantly higher than the scores of students attending matched comparison schools. For Mount Pleasant, there was a negative association between students at pilot program schools and mathematics and reading achievement. That is, students attending the

Mount Pleasant pilot program schools had mathematics and reading scores that were significantly lower than the scores of students attending matched comparison schools. Mathematics, reading, and science scores for students attending the Cedar Rapids pilot program were not statistically different from students attending comparison schools.

The evaluation also conducted a cost-effectiveness analysis using student achievement data as well as teacher survey data. In terms of per-student and per-teacher cost for each pilot, the Cedar Rapids program cost the most—nearly \$400 per student and nearly \$4,500 per teacher. MOC–Floyd Valley and Mount Pleasant cost about the same per student, approximately \$120. Mount Pleasant was the second costliest program per teacher at around \$3,500 while MOC–Floyd Valley was the least costly program per teacher at nearly \$2,000. Using program effects discovered in the teacher survey data analysis and the student achievement data analysis, the evaluation team also determined several estimates of cost-effectiveness. Using program effects from the teacher survey, the following determinations were made:

- To attain an effect size of 0.1 for a perceived difference in teachers' views of pay-for-performance, it cost the MOC–Floyd Valley pilot program \$126.84 per teacher, whereas this same difference cost Mount Pleasant \$215.68 per teacher.
- To attain an effect size of 0.1 for a perceived difference in teachers' views of career ladder programs, it cost the Cedar Rapids pilot program \$797.04 per teacher.
- To attain an effect size of 0.1 for a perceived difference in teachers' perceptions of professional development, it cost the Mount Pleasant pilot program \$402.72 per teacher.

Using program effects from the student achievement data, the following determinations were made:

- To attain an effect size of 0.1 for differences in students' reading achievement, it cost the MOC–Floyd Valley pilot program \$152.79 per student.
- To attain an effect size of 0.1 for differences in students' science achievement, it cost the MOC–Floyd Valley pilot program \$108.22 per student.

The final method used to investigate the three research questions was case studies that were informed by interviews and document reviews. One can find many more details about the benefits, strengths and weaknesses, and feasibility of scaled implementation of the three pilot programs by reading the in-depth case studies in Appendixes G, H, and I, some notable summary points are worth singling out across the three cases. For example, the two primary benefits identified across the three programs were teacher collaboration and a change in professional culture. The Cedar Rapids pilot program was anchored in an effort to enhance professional learning communities and the MOC–Floyd Valley and Mount Pleasant programs benefited participating schools by changing professional culture through, among other things, PLDs for students (MOC–Floyd Valley) and utilizing MAP data to improve instruction (Mount Pleasant). Two program strengths noted primarily by interviewees from MOC–Floyd Valley and Mount Pleasant were district leadership and communication. Interviewees from these two sites noted that district leadership helped shape and support the program and communication with stakeholders fostered buy-in and understanding about program goals. The primary strength noted by interviewees from the Cedar Rapids program was an aspect of the program specific to its

design—the enrichment specialist teachers who helped create the release time and make professional learning communities possible at participating schools. This aspect of the program seems to relate to the program’s ability to address school and instructional improvement issues that are not necessarily related to a career ladder, which was the framework of the Cedar Rapids program. The two primary weaknesses suggested by the pilot program interviewees were professional development and universal participation. Several interviewees commented that more professional development was needed to successfully implement aspects of the pilot programs. In addition, some interviewees commented that not offering the program to all teachers in the schools or district was a weakness. Pilot district interviewees also provided input on important considerations for the feasibility of scaling up these programs in other districts or across the state. For example, several interviewees said that stakeholder buy-in is imperative for program success and that cost can be a potential barrier if plans for sustainability are not made up front.

References

Iowa General Assembly. (2007b, April 26). *State of Iowa senate journal* (pp. 24–25). Des Moines, IA; Author. Retrieved April 20, 2009, from <http://www.legis.state.ia.us/pubs/sjweb/pdf/April%2026,%202007.pdf#page=24>

Rowland, C., Brown-Sims, M., Cushing, E., Hinojosa, T., & Manzeske, D. (2009). *Iowa's pay-for-performance and career ladder pilot program: External evaluation progress report* (Report 1 of 3). Naperville, IL: Learning Point Associates.

Rowland, C., Brown-Sims, M., Cushing, E., & Manzeske, D. (2009). *Iowa's pay-for-performance and career ladder pilot program: External evaluation progress report* (Report 2 of 3). Naperville, IL: Learning Point Associates.

Senate File 277. (2007). 82nd Iowa General Assembly. Retrieved April 20, 2010, from <http://coolice.legis.state.ia.us/Cool-ICE/default.asp?category=billinfo&service=billbook&GA=82&hbill=SF277>

Appendix A

Technical Appendix—Teacher and Administrator Survey Methods

Overview of Teacher and Administrator Survey Rounds

Survey Round 1

Between February 3, 2009, and March 11, 2009, the first round of online surveys was administered. This round was designed to collect baseline data. Only teachers and principals participating in one of the three pilot programs received the survey in this round. In the two survey administrations, 181 teachers and 11 administrators representing 10 elementary, middle, and high schools from three Iowa school districts were asked to complete the surveys. Six reminder e-mails were sent to nonresponders. By the survey close date, 59 percent of teachers ($N = 106$) and 64 percent of administrators ($N = 7$) had completed the survey.

Survey Round 2

The second round of surveys was administered between April 15 and 29, 2009, and was completed by those in the treatment group *and* by teachers and principals in comparison schools. This second round of surveys built upon the baseline surveys in that it collected data and perspectives of respondents in the treatment groups at the end of the 2008–09 school year. In the administration of the four surveys (treatment and comparison teachers and treatment and comparison administrators), a total of 1,107 teachers and 55 administrators representing 43 school districts (including MOC–Floyd Valley, Cedar Rapids, and Mount Pleasant) and 55 elementary, middle, and high schools throughout Iowa were asked to complete the surveys. Two reminder e-mails were sent to each group of respondents.

Survey Round 3

In the third and final round, surveys were disseminated to both treatment and comparison school teachers ($N = 1,107$) and principals ($N = 55$) between September 21 and October 2, 2009, for the purpose of comparing treatment group responses after they have started the 2009–10 academic school year to see what impact and changes, if any, had occurred since the implementation of the pay-for-performance and career-ladder programs.

Psychometric Analysis of the Teacher Survey

To ensure that the evaluation findings and recommendations were based on valid and reliable data, a psychometric validation was conducted for the teacher survey. A psychometric validation allows an evaluator to create valid scale scores on latent traits (e.g., teachers' views of pay for performance) by evaluating all the measurement properties of the instrument for construct and content validity. These scale scores—which consist of multiple items that are related from a theoretical perspective—give a quantitative view of frequency and intensity of a respondent's answers across a range of items.

For the analysis of survey items implementing a rating-scale response structure, Learning Point Associates employed the Rasch rating scale model (Andrich, 1978; Wright & Masters, 1982) as implemented with WINSTEPS (Linacre, 2005). The rating scale model can be written in the following format (Linacre, 2004):

$$\pi_{nix} = \frac{\exp \sum_{j=0}^x (\beta_n - (\delta_i + \tau_j))}{\sum_{k=0}^m \exp \sum_{j=0}^k (\beta_n - (\delta_i + \tau_j))}$$

This equation describes the probability that a respondent n , with trait level β_n on the underlying construct, responds with a rating of x to item i of difficulty δ_i (where the response scale is ordered from 0 to m). The τ_j represent the rating scale thresholds, or transition points, between categories.

The Rasch model defines a probabilistic relationship among the item difficulty, rating scale structure, and trait-level scores for the respondents. This relationship allows for the possibility that when data fit the Rasch model, both the item and teacher measures can be placed onto a common logit metric (Perline, Wright, & Wainer, 1979; Rasch, 1960). A result of this characteristic is that the researcher can create hierarchies of both items and respondents and make comparisons within and among them. When the data fit the model, it becomes a simple calculation to determine how a teacher would be expected to respond to a set of items.

In addition, the Rasch model accounts for the ordinal nature of self-report observations. Self-report observation data are not interval data; rather, they are ordinal in nature and should be treated as such (Wright & Linacre, 1989). Embretson (2006) has described errors that can result from using parametric statistical routines on ordinal data, among which are finding differences between the mean scores of groups when the true scores of the groups are the same (Maxwell & Delaney, 1985) and finding significant interactions in experimental studies when no interaction exists for the true scores (Embretson, 1996).

In contrast to the scores used in classical test theory, when data fit the Rasch model, the scale scores that result from the analysis provide an interval measure of the person's ability with respect to the latent trait (Wright, 1977). These interval-level measures then can be used to determine group differences with traditional parametric statistical modeling techniques. By scaling the responses to the survey items, Learning Point Associates was able to produce construct measures that lent themselves to proper use of statistical hypothesis testing and modeling.

In addition to producing scores that satisfy important statistical assumptions, the Rasch model is also very useful as a quality control mechanism. Specifically, the response data were analyzed for fit to model expectations and functioning of the rating scale. Examining item and respondent fit statistics allowed us to look for idiosyncrasies in the data that could have led to false conclusions when left unchecked. In addition, examining the functioning of the rating scale was imperative for ensuring that teachers' conceptions of the qualitative categories were consistent across contexts. Finally, the Rasch model (through the use of principal-components analyses of

the model residuals) was used to check the extent to which the items mapping to each construct defined a unidimensional measure.

Analysis of Teacher Survey Items

Teacher survey data were analyzed both descriptively and inferentially. Below is a description of the analytic procedures.

First, groups of items that were both on a Likert-type rating scale (*strongly disagree, disagree, agree, strongly agree*) and believed to represent theoretical constructs were psychometrically scaled using Rasch modeling as described earlier. For example, the six items about teacher collaboration were on a rating scale and also were believed to be related theoretically; therefore, they were analyzed using the Rasch model. From the Rasch modeling, seven scale scores were computed, each representing a single psychometrically valid and reliable score to account for the multifaceted nature of a given construct. The seven scale scores are as follows: (1) teachers' views of pay for performance, (2) teachers' views of career-ladder programs, (3) the use of student achievement and data, (4) school culture and support, (5) collaboration, (6) professional development, and (7) retrospective perceptions of school conditions (termed "looking back"). Teacher survey scale scores were analyzed in a statistical modeling procedure (individual growth modeling).

After the described procedures, those items that were not scaled were analyzed descriptively by conducting item-level frequencies, disaggregated by group and time of administration. Teacher survey items that were not scaled include several questions related to student achievement and data use, collaboration, and professional development.

References

- Andrich, D. (1978). A rating formulation for ordered response categories. *Psychometrika*, 43(4), 561–573.
- Embretson, S. E. (1996). Item response theory models and spurious interaction effects in factorial ANOVA designs. *Applied Psychological Measurement*, 20(3), 201–212.
- Embretson, S. E. (2006). The continued search for nonarbitrary metrics in psychology. *American Psychologist*, 61(1), 50–55.
- Linacre, J. M. (2004). Rasch model estimation: Further topics. In E. V. Smith, Jr. & R. M. Smith (Eds.), *Introduction to Rasch measurement: Theory, models, and applications* (pp. 48–72). Maple Grove, MN: JAM Press.
- Linacre, J. M. (2005). Winsteps [Computer software]. Chicago: Winsteps.com.
- Maxwell, S. E., & Delaney, H. D. (1985). Measurement and statistics: An examination of construct validity. *Psychological Bulletin*, 97(1), 85–93.

- Perline, R., Wright, B. D., & Wainer, H. (1979). The Rasch model as additive conjoint measurement. *Applied Psychological Measurement, 3*(2), 237–255.
- Rasch, G. (1980). *Probabilistic models for some intelligence and attainment tests*. Copenhagen: Danish Institute for Educational Research (Exp. ed.). Chicago: University of Chicago Press.)
- Wright, B. D. (1977). Solving measurement problems with the Rasch model. *Journal of Educational Measurement, 14*(2), 97–116.
- Wright, B. D., & Linacre, J. M. (1989). Observations are always ordinal; Measurements, however, must be interval. *Archives of Physical Medicine and Rehabilitation, 70*(12), 857–860.
- Wright, B. D., & Masters, G. N. (1982). *Rating scale analysis: Rasch measurement*. Chicago: MESA Press.

Appendix B

Technical Appendix—Student Achievement Data Analysis

This appendix describes the procedures used in analyzing student achievement data from the three treatment groups (pilot programs). The three possible student achievement outcomes are standardized achievement-test scores in mathematics, reading, and science. Presented first is a brief description of the modeling used to identify differences in student achievement between the treatment group and the comparison schools. That section is followed by descriptive statistics of student achievement scale scores, a description of the methods to identify collinearity among covariates, descriptive statistics of student-level covariates, and finally a series of tables summarizing the findings from the modeling.

Multiple Regression Models

Using SAS 9.0, three types of multiple regression models were fit using ordinary least squares estimation. Modeling was conducted separately for each district in the treatment group because of statewide differences in assessment schedules. Some schools test in the spring whereas other schools test in the fall; data corresponding to fall 2009 testing are not yet available. Pilot schools that test in spring are MOC–Floyd Valley and Mount Pleasant whereas schools in Cedar Rapids test in the fall. Therefore, the first set of models were fit for mathematics, readings, and science, including students at the four MOC–Floyd Valley schools and students attending the four corresponding matched comparison schools. The second set of models were fit for mathematics and reading, including students at the two Mount Pleasant schools and students attending the two corresponding matched comparison schools. (Science teachers at the two Mount Pleasant pilot schools did not participate in the program.) The third set of models were fit for mathematics, reading, and science, including participating schools and students in the Cedar Rapids school district and schools and students attending the corresponding matched comparison schools.

General Approach of the Modeling

The general approach of the modeling is to identify differences in student achievement scores between students in pilot program schools and students in matched comparison schools. In addition, student-level covariates (e.g., gender, minority status) were modeled to control for the effects of these characteristics on the outcomes of interest.

Justification for Single-Level Approach

All models were single-level, as opposed to two-level models. A multilevel approach was initially conducted however the single-level approach was employed due to the small amount of between-school variance in the outcomes of interest. When multilevel modeling was conducted, the between-school variance was not statistically significant. Statistically speaking, since nothing was to be gained from taking a two-level approach the multilevel model was abandoned.

Transformations of Achievement Scores and Covariates

For each student achievement model, scale scores were transformed into z -scores within each grade so that data from different grades could be included and compared within the same model. This standardization procedure resulted in means of zero and standard deviations of one for every student achievement variable—both outcomes and predictors—used in the analysis. Moreover, all covariates were grand-mean-centered with respect to each model. That is, student covariates were centered separately for each model. Therefore if a particular student in the analysis did not have a mathematics score, for example, that student’s corresponding demographic values (e.g., gender, individualized education program status) were not figured into the calculation of others students’ centered covariates.

Descriptive Statistics of Student Achievement Scores

Table B1 through Table B8 illustrate the z -score means, standard deviations, minimum and maximum values, and standard errors for each of the student achievement scores—scores disaggregated by pilot program district and its corresponding matched comparison schools. Because the student achievement tests were different for each grade level, assessment scores were standardized (i.e., converted to z -scores) within each program, within each grade, and for each assessment, using the following approach:

$$z\text{-score}_{it} = (\text{score}_{it} - \text{mean}_t) / \text{standard deviation}_t$$

Any individual student i ’s standardized score is the difference between their score and the mean performance (within the sample) on test t divided by the standard deviation of test t . Once standardized, the z -scores for each assessment (mathematics, reading, science) are comparable across grade levels as they convert all scores into standard deviation units. For example, irrespective of the grade-level-specific mathematics tests administered to students of MOC-Floyd Valley program schools and their corresponding comparison schools, the overall mean and standard deviation for all mathematics tests among this sample should be zero and one, respectively. Therefore, a mean z -score above zero represents higher average achievement among a given population, relative to a mean z -score that is less than this number.

Table B1. MOC–Floyd Valley: Descriptive Statistics of 2008–09 Mathematics z -scores

Group	N	Mean	Standard Deviation	Minimum	Maximum	Standard Error
Comparison schools	850	-0.09	0.99	-3.21	2.46	0.03
MOC–Floyd Valley schools	866	0.09	0.99	-3.13	2.21	0.03

**Table B2. MOC–Floyd Valley: Descriptive Statistics of
2008–09 Reading z-scores**

Group	<i>N</i>	Mean	Standard Deviation	Minimum	Maximum	Standard Error
Comparison schools	850	-0.16	0.98	-3.11	2.69	0.03
MOC–Floyd Valley schools	867	0.15	0.99	-3.06	2.55	0.03

**Table B3. MOC–Floyd Valley: Descriptive Statistics of
2008–09 Science z-scores**

Group	<i>N</i>	Mean	Standard Deviation	Minimum	Maximum	Standard Error
Comparison schools	849	-0.15	0.97	-3.14	2.63	0.03
MOC–Floyd Valley schools	866	0.14	1.00	-2.89	2.41	0.03

**Table B4. Mount Pleasant: Descriptive Statistics of
2008–09 Mathematics z-scores**

Group	<i>N</i>	Mean	Standard Deviation	Minimum	Maximum	Standard Error
Comparison schools	682	0.15	0.95	-2.80	2.35	0.04
Mount Pleasant schools	616	-0.16	1.03	-2.71	2.37	0.04

**Table B5. Mount Pleasant: Descriptive Statistics of
2008–09 Reading z-scores**

Group	<i>N</i>	Mean	Standard Deviation	Minimum	Maximum	Standard Error
Comparison schools	679	0.14	0.94	-2.57	2.87	0.04
Mount Pleasant schools	617	-0.15	1.03	-3.06	2.65	0.04

**Table B6. Cedar Rapids: Descriptive Statistics of
2008–09 Mathematics z-scores**

Group	<i>N</i>	Mean	Standard Deviation	Minimum	Maximum	Standard Error
Comparison schools	707	0.06	0.99	-2.68	3.01	0.04
Cedar Rapids schools	640	-0.06	1.00	-2.77	3.56	0.04

**Table B7. Cedar Rapids: Descriptive Statistics of
2008–09 Reading z-scores**

Group	<i>N</i>	Mean	Standard Deviation	Minimum	Maximum	Standard Error
Comparison schools	671	0.11	1.01	-2.40	3.07	0.04
Cedar Rapids schools	643	-0.11	0.98	-2.40	3.07	0.04

**Table B8. Cedar Rapids: Descriptive Statistics of
2008–09 Science z-scores**

Group	<i>N</i>	Mean	Standard Deviation	Minimum	Maximum	Standard Error
Comparison schools	639	0.09	1.04	-2.18	2.93	0.04
Cedar Rapids schools	641	-0.09	0.95	-2.76	3.60	0.04

Collinearity Diagnostics

Collinearity diagnostics were performed to assess the correlations among the student-level covariates included in the modeling. To detect collinearity, the following indicators were examined: variance inflation factor (VIF), tolerance (TOL), and an examination of eigenvalues and proportion of variance. Generally, collinearity is present when variables are associated with a VIF above 10.0, a TOL below 0.1, or if the eigenvalues are low when there is a high proportion of variance. The inclusion of variables that violate the above criteria may result in the estimation of unstable coefficients.

Informed by the above procedure, the following student-level variables were included in the multiple regression models:

- Gender (female = 0, male = 1)
- Minority status (no = 0, yes = 1)
- Special education status (no = 0, yes = 1)
- Free or reduced-price lunch (FRPL) eligibility (no = 0, yes = 1)
- English language learner (ELL) status (no = 0, yes = 1)

Student-Level Covariates

Student-level covariates correspond to characteristics that are student-specific. These student-level data are from the 2008–09 school year and were provided by the Iowa Department of Education. Item level frequencies for these five variables are disaggregated by group. The first set of variables is presented for MOC–Floyd Valley, followed by Mount Pleasant and Cedar Rapids (see table B9 through B23).

MOC–Floyd Valley

Table B9. MOC–Floyd Valley: Distribution of Gender

	<i>N</i>	Group		Overall
		Comparison (<i>n</i> = 853)	MOC–Floyd Valley (<i>n</i> = 871)	
Female	840	46.07	51.32	48.72
Male	884	53.93	48.68	51.28

Table B10. MOC–Floyd Valley: Distribution of Minority Status

	<i>N</i>	Group		Overall
		Comparison (<i>n</i> = 853)	MOC–Floyd Valley (<i>n</i> = 871)	
Nonminority status	1,522	89.1	87.49	88.28
Minority status	202	10.9	12.51	11.72

Table B11. MOC–Floyd Valley: Distribution of Special Education Status

	<i>N</i>	Group		Overall
		Comparison (<i>n</i> = 853)	MOC–Floyd Valley (<i>n</i> = 871)	
Non–special education status	1,522	88.16	88.4	88.28
Special education status	202	11.84	11.6	11.72

Table B12. MOC–Floyd Valley: Distribution of Free or Reduced-Price Lunch Status

	<i>N</i>	Group		Overall
		Comparison (<i>n</i> = 853)	MOC–Floyd Valley (<i>n</i> = 871)	
FRPL ineligible	1,356	75.62	81.63	78.65
FRPL eligible	368	24.38	18.37	21.35

Table B13. MOC–Floyd Valley: Distribution of English Language Learner Status

	<i>N</i>	Group		Overall
		Comparison (<i>n</i> = 853)	MOC–Floyd Valley (<i>n</i> = 871)	
Non-ELL status	1,657	97.77	94.49	96.11
ELL status	67	2.23	5.51	3.89

Mount Pleasant

Table B14. Mount Pleasant: Distribution of Gender

	<i>N</i>	Group		Overall
		Comparison (<i>n</i> = 682)	Mount Pleasant (<i>n</i> = 622)	
Female	671	51.32	51.61	51.46
Male	633	48.68	48.39	48.54

Table B15. Mount Pleasant: Distribution of Minority Status

	<i>N</i>	Group		Overall
		Comparison (<i>n</i> = 682)	Mount Pleasant (<i>n</i> = 622)	
Nonminority status	1,088	84.46	82.32	83.44
Minority status	216	15.54	17.68	16.56

Table B16. Mount Pleasant: Distribution of Special Education Status

	<i>N</i>	Group		Overall
		Comparison (<i>n</i> = 682)	Mount Pleasant (<i>n</i> = 622)	
Non-special education status	1,129	86.07	87.14	86.58
Special education status	175	13.93	12.86	13.42

Table B17. Mount Pleasant: Distribution of Free or Reduced-Price Lunch Status

	<i>N</i>	Group		Overall
		Comparison (<i>n</i> = 682)	Mount Pleasant (<i>n</i> = 622)	
FRPL ineligible	795	61.00	60.93	60.97
FRPL eligible	509	39.00	39.07	39.03

Table B18. Mount Pleasant: Distribution of English Language Learner Status

	<i>N</i>	Group		Overall
		Comparison (<i>n</i> = 682)	Mount Pleasant (<i>n</i> = 622)	
Non-ELL status	1,243	95.16	95.5	95.32
ELL status	61	4.84	4.5	4.68

Cedar Rapids

Table B19. Cedar Rapids: Distribution of Gender

	<i>N</i>	Group		Overall
		Comparison (<i>n</i> =711)	Cedar Rapids (<i>n</i> = 645)	
Female	655	50.63	45.74	48.30
Male	701	49.37	54.26	51.70

Table B20. Cedar Rapids: Distribution of Minority Status

	<i>N</i>	Group		Overall
		Comparison (<i>n</i> =711)	Cedar Rapids (<i>n</i> = 645)	
Nonminority status	964	70.61	73.05	71.78
Minority status	379	29.39	26.95	28.22

Table B21. Cedar Rapids: Distribution of Special Education Status

	<i>N</i>	Group		Overall
		Comparison (<i>n</i> =711)	Cedar Rapids (<i>n</i> = 645)	
Non-special education status	1,152	87.34	82.33	84.96
Special education status	204	12.66	17.67	15.04

Table B22. Cedar Rapids: Distribution of Free or Reduced-Price Lunch Status

	<i>N</i>	Group		Overall
		Comparison (<i>n</i> =711)	Cedar Rapids (<i>n</i> = 645)	
FRPL ineligible	676	52.60	46.82	49.85
FRPL eligible	680	47.40	53.18	50.15

Table B23. Cedar Rapids: Distribution of English Language Learner Status

	<i>N</i>	Group		Overall
		Comparison (<i>n</i> =711)	Cedar Rapids (<i>n</i> = 645)	
Non-ELL status	1,257	91.28	94.26	92.70
ELL status	99	8.72	5.74	7.30

Tables Summarizing the Multiple Regression Modeling Results

Tables B24A–B31C summarize the results of the multiple regression modeling of student achievement z-scores both for students attending a pilot program school and for students of comparison schools. The main purpose of fitting these models was to explore the differences in achievement scores between students attending pilot program schools and students attending comparison schools. Tables corresponding to the MOC–Floyd Valley analysis are presented first, followed by tables for Mount Pleasant and Cedar Rapids.

The following four types of tables are provided for each of the student achievement analyses:

- First, the A tables provide a summary of the number of students for whom achievement data are available and the total number of observations used in the modeling. Cases were dropped if a particular student was missing data.
- Second, the B tables provide the analysis of variance (ANOVA) summary, which is the statistical test for the overall model.
- Third, the C tables provide the statistical test of the coefficients for the program effect and the student-level covariates. The intercept denotes the average z-score score for the comparison schools. The estimate for each pilot program can be calculated by adding the intercept of the comparison schools to the estimate of the pilot program in question. In other words, the estimate for the pilot program variable represents the difference between z-scores of students attending a particular pilot program school and students attending a comparison school.

MOC–Floyd Valley

Mathematics

Table B24A. MOC–Floyd Valley: Number of Students for Mathematics

<i>N</i> students	1,716
<i>N</i> observations used	1,511

Source: Evaluator analysis of Iowa Department of Education student achievement data.

Table B24B. MOC–Floyd Valley: ANOVA Summary for Mathematics

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	1053.968	150.567	531.62	<0.0001*

Source: Evaluator analysis of Iowa Department of Education student achievement data.

Note: *Denotes significance at $p < 0.05$.

Table B24C. MOC–Floyd Valley: Results of Analysis of Student Achievement z-Scores for Mathematics

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept (composite)	1	–0.0004	0.019	–0.02	0.9833
MOC–Floyd Valley	1	0.042	0.028	1.50	0.1334
2008 mathematics z-score	1	0.776	0.015	50.14	<0.0001*
Gender	1	0.027	0.028	0.97	0.3319
Minority status	1	–0.127	0.053	–2.38	0.0174*
Special education status	1	–0.335	0.047	–7.20	<0.0001*
FRPL status	1	–0.082	0.037	–2.22	0.0264*
ELL status	1	0.154	0.094	1.63	0.1035

Source: Evaluator analysis of Iowa Department of Education student achievement data.
Note: *Denotes significance at $p < 0.05$.

Reading

Table B25A. MOC–Floyd Valley: Number of Students for Reading

<i>N</i> students	1,717
<i>N</i> observations used	1,510

Source: Evaluator analysis of Iowa Department of Education student achievement data.

Table B25B. MOC–Floyd Valley: ANOVA Summary for Reading

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	924.047	132.007	343.28	<0.0001*

Source: Evaluator analysis of Iowa Department of Education student achievement data.
Note: *Denotes significance at $p < 0.05$.

Table B25C. MOC–Floyd Valley: Results of Analysis of Student Achievement z-Scores for Reading

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept (Comp.)	1	–0.025	0.023	–1.11	0.2676
MOC–Floyd Valley	1	0.085	0.033	2.59	0.0097*
2008 reading z-score	1	0.702	0.018	39.21	<0.0001*
Gender	1	–0.051	0.032	–1.59	0.1116
Minority status	1	–0.046	0.062	–0.75	0.4539
Special education status	1	–0.410	0.054	–7.63	<0.0001*
FRPL status	1	–0.127	0.043	–2.95	0.0032*
ELL status	1	–0.063	0.111	–0.56	0.5731

Source: Evaluator analysis of Iowa Department of Education student achievement data.
Note: *Denotes significance at $p < 0.05$.

Science

Table B26A. MOC–Floyd Valley: Number of Students for Science

<i>N</i> students	1,715
<i>N</i> observations used	1,510

Source: Evaluator analysis of Iowa Department of Education student achievement data.

Table B26B. MOC–Floyd Valley: ANOVA Summary for Science

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	853.395	121.914	287.25	<0.0001*

Source: Evaluator analysis of Iowa Department of Education student achievement data.
Note: *Denotes significance at $p < 0.05$.

Table B26C. MOC–Floyd Valley: Results of Analysis of Student Achievement z-Scores for Science

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept (composite)	1	–0.046	0.024	–1.94	0.0523
MOC–Floyd Valley	1	0.120	0.034	3.51	0.0005*
2008 science z-score	1	0.682	0.019	36.58	<0.0001*
Gender	1	0.116	0.034	3.41	0.0007*
Minority status	1	–0.098	0.065	–1.50	0.1329
Special education status	1	–0.331	0.056	–5.93	<0.0001*
FRPL status	1	–0.084	0.045	–1.85	0.0644
ELL status	1	–0.024	0.116	–0.21	0.8363

Source: Evaluator analysis of Iowa Department of Education student achievement data.

Note: *Denotes significance at $p < 0.05$.

Mount Pleasant

Mathematics

Table B27A. Mount Pleasant: Number of Students for Mathematics

N students	1,298
N observations used	1,131

Source: Evaluator analysis of Iowa Department of Education student achievement data.

Table B27B. Mount Pleasant: ANOVA Summary for Mathematics

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	785.629	112.233	383.24	<0.0001*

Source: Evaluator analysis of Iowa Department of Education student achievement data.

Note: *Denotes significance at $p < 0.05$.

Table B27C. Mount Pleasant: Results of Analysis of Student Achievement z-Scores for Mathematics

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept (composite)	1	0.082	0.023	3.60	0.0003*
Mount Pleasant	1	-0.164	0.033	-5.03	<0.0001*
2008 mathematics z-score	1	0.782	0.018	42.57	<0.0001*
Gender	1	-0.019	0.033	-0.59	0.5526
Minority status	1	0.013	0.053	0.25	0.8057
Special education status	1	-0.198	0.052	-3.82	0.0001*
FRPL status	1	-0.038	0.036	-1.07	0.2834
ELL status	1	-0.168	0.096	-1.75	0.0810

Source: Evaluator analysis of Iowa Department of Education student achievement data.

Note: *Denotes significance at $p < 0.05$.

Reading

Table B28A. Mount Pleasant: Number of Students for Reading

N students	1,296
N observations used	1,132

Source: Evaluator analysis of Iowa Department of Education student achievement data.

Table B28B. Mount Pleasant: ANOVA Summary for Reading

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	730.649	104.378	310.68	<0.0001*

Source: Evaluator analysis of Iowa Department of Education student achievement data.

Note: *Denotes significance at $p < 0.05$.

Table B28C. Mount Pleasant: Results of Analysis of Student Achievement z-Scores for Reading

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept (composite)	1	0.091	0.024	3.74	0.0002*
Mount Pleasant	1	-0.195	0.035	-5.61	<0.0001*
2008 reading z-score	1	0.745	0.020	37.63	<0.0001*
Gender	1	-0.060	0.035	-1.72	0.0866
Minority status	1	-0.002	0.056	-0.04	0.9660
Special education status	1	-0.120	0.055	-2.17	0.0305*
FRPL status	1	-0.062	0.038	-1.62	0.1051
ELL status	1	-0.322	0.105	-3.07	0.0022*

Source: Evaluator analysis of Iowa Department of Education student achievement data.

Note: *Denotes significance at $p < 0.05$.

Cedar Rapids

Mathematics

Table B29A. Cedar Rapids: Number of Students for Mathematics

<i>N</i> students	1,347
<i>N</i> observations used	779

Source: Evaluator analysis of Iowa Department of Education student achievement data.

Table B29B. Cedar Rapids: ANOVA Summary for Mathematics

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	552.695	78.957	270.91	<0.0001*

Source: Evaluator analysis of Iowa Department of Education student achievement data.

Note: *Denotes significance at $p < 0.05$.

Table B29C. Cedar Rapids: Results of Analysis of Student Achievement z-Scores for Mathematics

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept (composite)	1	0.048	0.028	1.74	0.082
Cedar Rapids	1	-0.033	0.039	-0.83	0.4067
2008 mathematics z-score	1	0.799	0.021	37.19	<0.0001*
Gender	1	0.067	0.039	1.72	0.0857
Minority status	1	-0.021	0.053	-0.40	0.6866
Special education status	1	-0.249	0.059	-4.22	<0.0001*
FRPL status	1	-0.079	0.044	-1.82	0.0698
ELL status	1	0.066	0.094	0.70	0.4829

Source: Evaluator analysis of Iowa Department of Education student achievement data.

Note: *Denotes significance at $p < 0.05$.

Reading

Table B30A. Cedar Rapids: Number of Students for Reading

N students	1,314
N observations used	781

Source: Evaluator analysis of Iowa Department of Education student achievement data.

Table B30B. Cedar Rapids: ANOVA Summary for Reading

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	457.3516	65.3359	162.37	<0.0001*

Source: Evaluator analysis of Iowa Department of Education student achievement data.

Note: *Denotes significance at $p < 0.05$.

Table B30C. Cedar Rapids: Results of Analysis of Student Achievement z-Scores for Reading

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept (composite)	1	0.048	0.033	1.47	0.1418
Cedar Rapids	1	-0.032	0.047	-0.69	0.4893
2008 reading z-score	1	0.724	0.026	27.42	<0.0001*
Gender	1	-0.034	0.046	-0.74	0.4573
Minority status	1	-0.076	0.061	-1.23	0.2178
Special education status	1	-0.144	0.072	-2.00	0.0458*
FRPL status	1	-0.044	0.051	-0.86	0.3897
ELL status	1	-0.027	0.111	-0.25	0.8050

Source: Evaluator analysis of Iowa Department of Education student achievement data.
 Note: *Denotes significance at $p < 0.05$.

Science

Table B31A. Cedar Rapids: Number of Students for Science

N students	1,280
N observations used	782

Source: Evaluator analysis of Iowa Department of Education student achievement data.

Table B31B. Cedar Rapids: ANOVA Summary for Science

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	395.167	56.452	113.93	<0.0001*

Source: Evaluator analysis of Iowa Department of Education student achievement data.
 Note: *Denotes significance at $p < 0.05$.

Table B31C. Cedar Rapids: Results of Analysis of Student Achievement z-Scores for Science

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept (composite)	1	0.030	0.036	0.76	0.4501
Cedar Rapids	1	0.006	0.052	0.11	0.9102
2008 science z-score	1	0.645	0.027	23.64	<0.0001*
Gender	1	0.158	0.051	3.13	0.0018*
Minority status	1	-0.171	0.068	-2.52	0.0120*
Special education status	1	-0.243	0.075	-3.23	0.0013*
FRPL status	1	-0.108	0.057	-1.91	0.0569
ELL status	1	-0.013	0.121	-0.11	0.9137

Source: Evaluator analysis of Iowa Department of Education student achievement data.
Note: *Denotes significance at $p < 0.05$.

Appendix C Case Study Framework

		Criteria	Definition
Case Study Themes and Sections	Case Study Site Attributes	Recent Initiatives	What programs has the district recently implemented to improve education?
		Relevant Events	What are significant events that have affected how the district operates?
		Organizational Factors	Might any organizational factors affect the manner in which incentive programs are implemented?
		Successes	What successes has the district recently enjoyed (other initiatives related to education but not specific to the program)?
		Challenges	What challenges face the district (not specific to the program but other challenges within the district)?
	Case Study Areas of Findings	Compensation/ Incentive Structure	What type of compensation/incentive packages are in place? Is the program mandatory or can teachers/schools opt out? Is it being piloted in a subset of schools? Teacher or administrator or both? Hard-to-staff schools or hard-to-staff subject areas or both? Group or individual awards? When do payouts occur? Are there phases of implementation? What is the theory of action for the program?
		Preliminary Work	Did the state or district conduct any preliminary surveys or stakeholder meetings to gauge the level of teacher/administrator/public support for new forms of compensation before proceeding? If so, what did the surveys or stakeholder meetings reveal? What was the impetus for the program?
		Goals/Intended Outcomes	What are the goals and intended outcomes of the program(s)?
		Collaboration With Teachers	How did the district or state involve teachers and other key stakeholders in the development and implementation of the program? How early in the process were they involved—from the outset or after the fact?
		Measurement	What metrics are used or are in development (to determine awards, not to evaluate the program)?
		IT	What data systems are in place? To what degree can teachers, classrooms, and schools be connected to programs and students? How often are teachers/administrators able to access the information and use the data to change practice?

		Criteria	Definition
Case Study Themes and Sections	Case Study Areas of Findings	Support of and for Compensation Models	Findings about political, social, and cultural factors that support compensation/incentive programs. Findings about how state and district leaders built and sustained community support for the programs. Is there teacher and parent support?
		Communication	How did the state or district provide ongoing information about the proposed program to teachers and the public? Did the state or district launch any type of public-relations campaign to build support? If so, what did they do?
		Emerging Issues	Findings about emerging issues in program design and implementation. How are those issues addressed?
		Successes/ Nonsuccesses	Findings on program components that worked or did not work (both data-based and anecdotally). How are those components addressed? What are some recommendations to improve the success of the program? Identify strengths and weaknesses of the program design and implementation.
		Opposition	How much, if any, organized opposition has there been to the program? What is the nature of the opposition? How is the opposition addressed?
		Effectiveness	How will the program show effectiveness? What does the program effectiveness look like (rises in student achievement, improvements in teacher retention)? What system of evaluation will the program use?
		Program Feasibility	How feasible is the scaled implementation of the program (statewide or districtwide)? Could this program work in other schools? Other districts? What are the estimated costs of a scaled implementation?
		Impact	What was the program impact (motivation, retention through career growth, classroom practice, school environment)?
		Leadership	What was the role of leadership in the success or nonsuccess of the program? (How did leadership implement the program, communicate the program, support the program?)
		Resources	Are there sufficient resources to implement the program? Other than money, were there sufficient resources? If so, what were they, where did they come from, how were they allocated, why were these items important for the implementation? If not, what else is needed?
		Program Fidelity	With regard to the collective theory of action, identify common variables associated with program implementation fidelity.

Appendix D

Technical Appendix—Cost-Effectiveness Analysis

This appendix describes the procedures used to conduct the cost-effectiveness analysis for the Iowa pay-for-performance/career ladder pilot program evaluation. This analysis is, in effect, an extension of both the teacher survey analysis and the student achievement analysis in order to provide a financial estimate of the cost associated with a given program finding. Separate analyses were conducted for each of the three pilot programs.

Calculating Cost-Effectiveness

Cost-effectiveness was calculated in one of two ways because of the differences in metrics between teacher scale scores and the student achievement scores. Highlighted is the calculation of cost-effectiveness for differences in teachers' perceptions and student achievement differences, respectively.

Cost-effectiveness for differences in teachers' perceptions

The general formula to estimate the cost of a 0.1 effect size for differences in teachers' perceptions on the teacher survey is calculated in two parts:

Part 1:

$$X_{ij} = \frac{\text{[mean difference between teacher scale scores]}}{\sigma_p}$$

where X_{ij} is, in essence, the effect size for teacher scale score i associated with pilot program j , and σ_p is the pooled deviation, weighted by the number of respondents at each round of survey administration. Note: values corresponding to mean differences between teacher scale scores, in the equation are summarized in Table D1.

Table D1. Summary of Positive Program Effects per Teacher Survey

Effect	Program Effects (Mean Positive Differences)		
	Cedar Rapids	MOC-Floyd Valley	Mount Pleasant
Views of pay for performance	—————	47.76	48.44
Views of career-ladder programs	31.85	—————	—————
Student achievement and data use	—————	—————	—————
School culture and support	—————	—————	—————
Collaboration	—————	—————	—————
Professional development	—————	—————	34.76
Looking back	—————	—————	—————

Note: Complete model summaries associated with the above program effects can be found in Appendix F.

Note: A long dash (————) indicates either a statistically nonsignificant effect or a negative effect.

Part 2:

$$Y_{ij} = \frac{0.1}{X_{ij}} \times [C_j]$$

where Y_{ij} is the estimated cost of a 0.1 effect size for observed differences in teachers' perceptions associated with scale score i and program j , C_j is the cost per teacher at program j , and X_{ij} is the effect size for the teacher scale scores, as noted above. Note: program costs per teacher are summarized in Table D2.

Table D2. Pilot Program Costs per Teacher

Program	Cost per Participating Teacher
Cedar Rapids	\$4,493.34
MOC–Floyd Valley	\$1,827.92
Mount Pleasant	\$3,492.96

Note: Pilot program costs were calculated by dividing the number of participating teachers by the final costs associated with each respective program.

Cost-Effectiveness for Student Achievement Differences

The general formula to estimate the cost of a 0.1 effect size for programmatic differences in student achievement is as follows:

$$Y_{ij} = \frac{0.1}{[\text{program difference in standardized achievement scores}]} \times [C_j]$$

where Y_{ij} is the estimated cost of a 0.1 effect size for observed differences in student achievement associated with test i and program j , and C_j is the cost per student at program j . Note: values corresponding to program differences in standardized achievement scores, in the above equation are summarized in Table D3, and program costs per student are summarized in Table D4.

Table D3. Summary of Positive Program Effects per Student Achievement

Effect	Program Effects (Mean Positive Differences)		
	Cedar Rapids	MOC–Floyd Valley	Mount Pleasant
Mathematics	————	————	————
Reading	————	0.085	————
Science	————	0.12	n/a

Note: Complete model summaries associated with the above program effects can be found in Appendix X.

Note: A long dash (————) indicates either a statistically nonsignificant effect or a negative effect.

Note: Science achievement was not tested between students at Mount Pleasant and students at corresponding matched comparison schools.

Table D4. Pilot Program Costs per Student

Program	Cost per Student
Cedar Rapids	\$383.72
MOC–Floyd Valley	\$129.87
Mount Pleasant	\$121.74

Note: Pilot program costs were calculated by dividing the number of students by the final costs associated with each respective program.

Appendix E

Administrator Survey—Tables and Findings

General School and Administrator Information

Table E1. Years of Experience at Current School

<i>How long have you been a principal at your current school?</i>		This Is My First Year (<i>n</i>)	More Than One but Less Than Five Years (<i>n</i>)	Longer Than Five Years (<i>n</i>)
Round	Administrator Response <i>N</i>			
1	Tx administrators* (<i>N</i> = 7)	1	2	4
2	Tx administrators (<i>N</i> = 8)	1	2	5
	Cx administrators** (<i>N</i> = 10)	2	3	5
3	Tx administrators (<i>N</i> = 5)	0	0	5
	Cx administrators (<i>N</i> = 9)	0	3	6

*Tx administrators refers to all principals from the three participating pilot sites: MOC–Floyd Valley, Cedar Rapids, and Mount Pleasant school districts. Because the number of overall participating schools within each district and number of response rates were small, the evaluation team has combined these districts’ responses into one category to ensure respondents’ confidentiality.

**Cx administrators refers to all principals from the sample of 40 comparison schools who completed the survey(s).

When administrators were asked how long they had been an administrator at their current school, survey findings across all three administrations reveal that

- Administrators in general were not newly hired or transferred to their schools; rather, they had spent a minimum of two years as principals at their schools.
- Moreover, in both the comparison and pilot site groups, nearly twice as many administrators had five or more years at their current school as had two to four years at their schools.

Table E2. Total Years Experience as an Administrator

<i>Including this year, how many total years of experience being a school principal do you have?</i>		Less Than One Full Year (<i>n</i>)	1 to 3 Years (<i>n</i>)	4 to 6 Years (<i>n</i>)	7 or More Years (<i>n</i>)
Round	Administrator Response <i>N</i>				
1	Tx administrators* (<i>N</i> = 7)	0	0	1	6
2	Tx administrators (<i>N</i> = 8)	0	0	1	7
	Cx administrators** (<i>N</i> = 10)	1	1	1	7
3	Tx administrators (<i>N</i> = 5)	0	0	0	5
	Cx administrators (<i>N</i> = 9)	0	1	0	8

*Tx administrators refers to all principals from the three participating pilot sites: MOC–Floyd Valley, Cedar Rapids, and Mount Pleasant school districts. Because the number of overall participating schools within each district and number of response rates were small, the evaluation team has combined these districts’ responses into one category to ensure respondents’ confidentiality.

**Cx administrators refers to all principals from the sample of 40 comparison schools who completed the survey(s).

Principals were asked to report the total number of years of previous administrator experience to date. The data shows that

- Across all three survey a larger proportion of administrators from both the comparison and pilot sites report having seven or more years of administrative experience.
- Very few administrators (*n* =3) reported having less than three years of overall experience across all three survey distributions.

Table E3. Number of Students Enrolled

<i>Approximately how many students are enrolled in your school?</i>		Fewer Than 50 Students (<i>n</i>)	50 to 100 Students (<i>n</i>)	101 to 200 Students (<i>n</i>)	201 to 300 Students (<i>n</i>)	301 to 400 Students (<i>n</i>)	401 to 500 Students (<i>n</i>)	501 or More Students (<i>n</i>)
Round	Administrator Response <i>N</i>							
1	Tx administrators* (<i>N</i> = 7)	0	0	0	1	2	3	1
2	Tx administrators (<i>N</i> = 8)	0	0	0	2	1	4	1
	Cx administrators** (<i>N</i> = 10)	0	0	1	1	4	3	1
3	Tx administrators (<i>N</i> = 5)	0	0	0	1	0	2	2
	Cx administrators (<i>N</i> = 9)	0	0	0	2	3	4	0

*Tx administrators refers to all principals from the three participating pilot sites: MOC–Floyd Valley, Cedar Rapids, and Mount Pleasant school districts. Because the number of overall participating schools within each district and number of response rates were small, the evaluation team has combined these districts’ responses into one category to ensure respondents’ confidentiality.

**Cx administrators refers to all principals from the sample of 40 comparison schools who completed the survey(s).

To understand the general size of the district, administrators were asked to provide a breakdown of the approximate number of students enrolled within their districts.

- Across all three survey time points, only one (comparison) administrator reported having a student population of 200 students or less. No administrators stated that they had fewer than 100 students.
- Administrators from the three pilot sites reported having student populations ranging from 200 (*n* = 4 across all three surveys) to more than 500 students (*n* = 4).
- Across both survey stakeholder groups, the greatest number of administrators (*n* = 16) reported student populations between 401 and 500 students.

Table E4. Percentage of Minority Students

<i>What percentage of your student population is considered minority (e.g., African American, Hispanic/Latino, Asian)?</i>		Less Than 25 Percent (n)	25 to 49 Percent (n)	50 to 74 Percent (n)	75 to 99 Percent (n)	100 Percent (n)	Do Not Know (n)
Round	Administrator Response N						
1	Tx administrators* (N = 7)	6	1	0	0	0	0
2	Tx administrators (N = 8)	6	2	0	0	0	0
	Cx administrators** (N = 10)	9	1	0	0	0	0
3	Tx administrators (N = 5)	4	1	0	0	0	0
	Cx administrators (N = 9)	7	2	0	0	0	0

*Tx administrators refers to all principals from the three participating pilot sites: MOC–Floyd Valley, Cedar Rapids, and Mount Pleasant school districts. Because the number of overall participating schools within each district and number of response rates were small, the evaluation team has combined these districts’ responses into one category to ensure respondents’ confidentiality.

**Cx administrators refers to all principals from the sample of 40 comparison schools who completed the survey(s).

The representation of minority students (e.g., African American, Hispanic/Latino, Asian) across districts that completed the survey was as follows:

- No district reported having a minority representation above 50 percent.
- More specifically, data from all survey rounds indicate that most administrators (e.g., 16 principals each from both comparison and pilot sites) report having a student body with less than 25 percent from an ethnic minority.

Table E5. Percentage of Students Receiving Free or Reduced-Price Lunch

<i>What percentage of your student population qualifies for reduced-price lunch?</i>		Less Than 25 Percent (<i>n</i>)	25 to 49 Percent (<i>n</i>)	50 to 74 Percent (<i>n</i>)	75 to 99 Percent (<i>n</i>)	100 Percent (<i>n</i>)	Do Not Know (<i>n</i>)
Round	Administrator Response <i>N</i>						
1	Tx administrators* (<i>N</i> = 7)	1	3	3	0	0	0
2	Tx administrators (<i>N</i> = 8)	3	2	3	0	0	0
	Cx administrators** (<i>N</i> = 10)	2	7	1	0	0	0
3	Tx administrators (<i>N</i> = 5)	2	1	2	0	0	0
	Cx administrators (<i>N</i> = 9)	1	6	2	0	0	0

*Tx administrators refers to all principals from the three participating pilot sites: MOC–Floyd Valley, Cedar Rapids, and Mount Pleasant school districts. Because the number of overall participating schools within each district and number of response rates were small, the evaluation team has combined these districts’ responses into one category to ensure respondents’ confidentiality.

**Cx administrators refers to all principals from the sample of 40 comparison schools who completed the survey(s).

When asked to denote what percentage of their student body qualifies for reduced-price lunch, survey findings indicate the following:

- No administrator reported having more than 75 percent of its student population qualifying for this service.
- Rather, more administrators (*n* = 8) from the pilot site who took part in one of the three surveys reported having between half and three quarters of its students eligible for reduced-price lunch.
- In contrast, principals from the comparison (*n* = 13 across the second and third surveys) reported having only a quarter to less than half their student body qualify.

Table E6. Number of Full-Time Teachers

<i>Approximately how many full-time teachers are currently employed at your school?</i>		Fewer Than 20 Teachers (n)	21 to 50 Teachers (n)	51 to 75 Teachers (n)	76 to 100 Teachers (n)	101 Teachers or More (n)	Do Not Know (n)
Round	Administrator Response N						
1	Tx administrators* (N = 7)	1	6	0	0	0	0
2	Tx administrators (N = 8)	0	8	0	0	0	0
	Cx administrators** (N = 10)	1	9	0	0	0	0
3	Tx administrators (N = 5)	0	5	0	0	0	0
	Cx administrators (N = 9)	0	9	0	0	0	0

*Tx administrators refers to all principals from the three participating pilot sites: MOC–Floyd Valley, Cedar Rapids, and Mount Pleasant school districts. Because the number of overall participating schools within each district and number of response rates were small, the evaluation team has combined these districts’ responses into one category to ensure respondents’ confidentiality.

**Cx administrators refers to all principals from the sample of 40 comparison schools who completed the survey(s).

The number of full-time teachers working with the districts of both the pilot site and comparison school districts was primarily concentrated under the designation of 21 to 50 classroom teachers. No administrators reported having more than 51 full-time teachers in any one school.

Table E7. Grade Levels Within Schools

<i>What grade levels are at your school?*</i>		Elementary (PK–5) (<i>n</i>)	Middle or Junior High School (6–8) (<i>n</i>)	High School (9–12) (<i>n</i>)‡
Round	Administrator Response <i>N</i>			
1	Tx administrators** (<i>N</i> = 7)	5	2	1
2	Tx administrators (<i>N</i> = 8)	6	2	1
	Cx administrators† (<i>N</i> = 10)	5	7	3
3	Tx administrators (<i>N</i> = 5)	2	4	1
	Cx administrators (<i>N</i> = 9)	5	3	4

*Respondents were given the option of selecting “all that apply.” Thus, totals of *n*’s may be larger than the corresponding *N*’s.

**Tx administrators refers to all principals from the three participating pilot sites: MOC–Floyd Valley, Cedar Rapids, and Mount Pleasant school districts. Because the number of overall participating schools within each district and number of response rates were small, the evaluation team has combined these districts’ responses into one category to ensure respondents’ confidentiality.

†Cx administrators refers to all principals from the sample of 40 comparison schools who completed the survey(s).

‡Administrators had the option of selecting more than one response option. In the cases where an administrator is principal of a regular high school (Grades 9–12) *and* an alternative high school, there is a possibility that that administrator’s responses would be counted twice.

Administrators were asked about the breakdown of grade levels within their schools. Survey results reveal the following:

- Only 1 administrator from the pilot districts at each survey administration was employed as a high school principal. More principals from this group (*n* = 13) were elementary school principals than were middle school principals (*n* = 8)
- Roughly an equal number of comparison group administrators from across both the second and third surveys reported being principals at an elementary (*n* = 5 on both surveys) and high school (*n* = 3 in round two, *n* = 4 in round three). For middle school, the numbers differed (*n* = 7 in round two, *n* = 3 in round three).

Table E8. Subject Most in Need of Improvement

<i>Which subject(s) in your school are students most in need of improvement?*</i>		Reading/ Language Arts (<i>n</i>)	Foreign Languages (<i>n</i>)	Mathematics (<i>n</i>)	Science (<i>n</i>)	Social Studies (<i>n</i>)	Other** (<i>n</i>)
Round	Administrator Response <i>N</i>						
1	Tx administrators† (<i>N</i> = 7)	6	0	6	0	0	0
2	Tx administrators (<i>N</i> = 8)	5	0	5	0	0	1
	Cx administrators‡ (<i>N</i> = 10)	7	1	2	0	1	0
3	Tx administrators (<i>N</i> = 5)	4	0	5	0	0	0
	Cx administrators (<i>N</i> = 9)	8	0	4	0	0	0

*This question instructed to “select all that apply,” and thus *n*’s may total to a sum larger than the corresponding *N*’s.

**–Other” response options included writing.

†Tx administrators refers to all principals from the three participating pilot sites: MOC–Floyd Valley, Cedar Rapids, and Mount Pleasant school districts. Because the number of overall participating schools within each district and number of response rates were small, the evaluation team has combined these districts’ responses into one category to ensure respondents’ confidentiality.

‡Cx administrators refers to all principals from the sample of 40 comparison schools who completed the survey(s).

When asked to identify the core subjects that are most in need of improvement, the top two subject areas identified across comparison and pilot program administrators across survey time points were reading/language arts and mathematics. The only subject not selected was science.

Views of Pay-for-Performance

Administrators who were apart of the MOC–Floyd Valley, Cedar Rapids, and Mount Pleasant school districts were asked about their perspectives on a variety of pay-for-performance- related issues. A summary of the findings is given in table E9 and the commentary following.

Table E9. Participating Administrator Groups’ Perspective on Pay-for-Performance Programs

<i>Indicate the extent to which you agree or disagree with the following statements about pay-for-performance programs.*</i>			Strongly Disagree (n)	Disagree (n)	Agree (n)	Strongly Agree (n)
Prompt	Round	Administrator Response N				
There is value in implementing a pay-for-performance program in my school.*	1	Tx administrators (N = 7)	1	3	2	1
	2	Tx administrators (N = 8)	2	5	1	0
	3	Tx administrators (N = 5)	1	2	1	1
I would like to see a pay-for-performance program in my school next year.	1	Tx administrators (N = 7)	1	4	1	1
	2	Tx administrators (N = 8)	2	0	6	0
	3	Tx administrators (N = 5)	1	2	1	1
There is support from teachers in my school to implement a pay-for-performance program.	1	Tx administrators (N = 7)	0	4	3	0
	2	Tx administrators (N = 8)	2	3	3	0
	3	Tx administrators (N = 5)	1	2	2	0
A pay-for-performance program is a priority in my school.	1	Tx administrators (N = 7)	4	2	1	0
	2	Tx administrators (N = 8)	2	4	2	0
	3	Tx administrators (N = 5)	1	2	1	1
As the school principal, I am in support for having a pay-for-performance program for my teachers.	1	Tx administrators (N = 7)	1	4	1	1
	2	Tx administrators (N = 8)	2	0	6	0
	3	Tx administrators (N = 5)	1	2	1	1

*These questions were asked only of administrators in the three districts participating in a pay-for-performance or career-ladder program only.

- **Value in implementing a pay-for-performance in schools.** Across all three survey administrations, a slightly higher number of principals (e.g., round 1: $n = 4$, round 2: $n = 7$, and round 3: $n = 3$) either strongly disagreed or disagreed with the statement that there is value in implementing this type of compensation program in their schools.
- **Wanting a pay-for-performance programs in schools.** Administrators in survey rounds 1 ($n = 5$) and 3 ($n = 3$) expressed disagreement with wanting to see a pay-for-performance program in their schools and two administrators in these rounds strongly agreed or agreed with the same statement. Only in round 2 ($n = 6$) did more principals agree than disagreed.
- **Teacher support of pay-for-performance program in schools.** Looking across all survey rounds, survey findings indicate that administrators in general believe that teachers within their schools would not be supportive of having a pay-for-performance program implemented. For example, three administrators from the second and third surveys stated they strongly disagreed with the statement and no administrators across the surveys indicated very strong support among their faculty.
- **Priority of pay-for-performance program in schools.** Most administrators strongly disagreed or disagreed with the statement that having pay-for-performance program in their schools is a priority.
- **Administrator support of pay-for-performance program in schools.** Findings related to administrator's own personal support of the pay-for-performance program mirrored those exactly of those respondents who noted their lack of support for a pay-for-performance program in their schools with administrators in survey rounds 1 ($n = 5$) and 3 ($n = 3$) expressing varying degrees of disagreement.

Table E10. Comparison Administrator’s Perspective on Pay-for-Performance Programs

<i>Indicate the extent to which you agree or disagree with the following statements about pay-for-performance programs.*</i>			Strongly Disagree (n)	Disagree (n)	Agree (n)	Strongly Agree (n)
Prompt	Round	Administrator Response N				
I would like to see a pay-for-performance program in my school next year.	2	Cx administrators (N = 10)	5	2	3	0
	3	Cx administrators (N = 9)	5	3	1	0
I think teachers in my school would support a pay-for-performance program.	2	Cx administrators (N = 10)	7	2	1	0
	3	Cx administrators (N = 9)	2	6	1	0
There would be support from school leadership (e.g., principal, vice principal, teacher leader) to implement a pay-for-performance program.	2	Cx administrators (N = 10)	5	2	3	0
	3	Cx administrators (N = 9)	5	2	2	0

*These questions were asked only of administrators *not* participating in any pay-for-performance program within the state (i.e., Cx administrators).

Administrators who were selected as a part of the comparison group school districts also were asked about their perspectives on a variety of pay-for-performance-related issues. A summary of their findings follow.

- **Wanting a pay-for-performance programs in schools.** Administrators in survey rounds 2 ($n = 7$) and 3 ($n = 8$) expressed varying degrees of disagreement with wanting to see a pay-for-performance program in their schools and four other administrators in the same rounds noted that they agreed with the statement.
- **Teacher support of pay-for-performance program in schools.** Survey findings from all rounds indicate that administrators overwhelmingly believe that teachers within their schools would not be supportive of a pay-for-performance program. For example, 17 administrators from the second and third surveys stated they disagreed or strongly disagreed with the statement and no administrators across the surveys indicated very strong support among their faculty.
- **Leadership support of pay-for-performance program in schools.** Findings related to administrator’s belief that school leadership personnel support of the pay-for-performance program mirrored closely to those respondents who noted their lack of desire for a pay-for-performance program in their schools. Administrators in both survey rounds 2 and 3, respectively ($n = 10$) expressed that they strongly disagree with the notion that there would be support among their school leadership.

Views of Career-Ladder Programs

Table E11. Participating Administrators' Perspectives on Career-Ladder Programs

<i>Indicate the extent to which you agree or disagree with the following statements about career ladder programs.*</i>			Strongly Disagree (n)	Disagree (n)	Agree (n)	Strongly Agree (n)
Prompt	Round	Administrator Response N				
There is value in implementing a career ladder program in my school.	1	Tx administrators (N = 7)	0	1	4	2
	2	Tx administrators (N = 8)	0	0	5	3
	3	Tx administrators (N = 5)	0	1	3	1
I would like to see a career ladder program in my school next year.	1	Tx administrators (N = 7)	0	1	4	2
	2	Tx administrators (N = 8)	0	0	6	2
	3	Tx administrators (N = 5)	0	1	3	1
There is support from teachers in my school to implement a career ladder program.	1	Tx administrators (N = 7)	0	0	5	2
	2	Tx administrators (N = 8)	0	1	6	1
	3	Tx administrators (N = 5)	0	0	4	1
A career ladder program is a priority in my school.	1	Tx administrators (N = 7)	0	2	2	3
	2	Tx administrators (N = 8)	0	2	6	0
	3	Tx administrators (N = 5)	0	4	0	1
As the school principal, I am in support of having a career ladder program for my teachers.	1	Tx administrators (N = 7)	0	1	4	2
	2	Tx administrators (N = 8)	0	0	5	3
	3	Tx administrators (N = 5)	0	1	3	1

* These questions were asked only of administrators in the three districts *currently participating* in a pay-for-performance or career-ladder program.

Administrators who were apart of the pilot programs (e.g., MOC–Floyd Valley, Cedar Rapids, and Mount Pleasant school districts) were asked about their perspectives on a variety of career-ladder related issues. In general, there was more overall support for a career-ladder program than a pay-for-performance program among this group of administrators. A summary of the findings is described below.

- **Value in implementing a career-ladder program in schools.** Across all three survey administrations, a higher number of principals (e.g., round 1: $n = 6$, round 2: $n = 8$, and round 3: $n = 4$) either agreed or strongly agreed with the statement that there is value in implementing a career-ladder program in their schools.
- **Wanting a career-ladder program in schools.** Administrators in all three survey rounds expressed varying degrees of agreement with wanting to see a pay-for-performance program in their schools. For example, in round 2, all eight administrators stated they either agreed or strongly agreed with the statement.
- **Teacher support of career-ladder in schools.** Survey findings across the three rounds indicate that administrators in general believe that teachers within their schools would be supportive of a career-ladder program. For example, 19 out of the 20 administrators that completed the survey from across all three surveys stated they strongly agreed or agreed with the statement.
- **Priority of career-ladder program in schools.** As results from the three surveys reveal, in general, most administrators agree or strongly agree with the statement that having a career-ladder program in their schools is a priority, with the exception of two principals each in the first and second surveys, who noted disagreement.
- **Administrator support of career-ladder program in schools.** Findings related to administrator’s own personal support of the career-ladder program mirrored closely those respondents who noted their support of wanting a career-ladder program in their schools. Only two principals from the first and third survey stated they disagreed with the statement.

Table E12. Comparison Administrators’ Perspectives on Career-Ladder Programs

<i>Indicate the extent to which you agree or disagree with the following statements about career ladder programs.*</i>			Strongly Disagree (n)	Disagree (n)	Agree (n)	Strongly Agree (n)
Prompt	Round	Administrator Response N				
I would like to see a career ladder program in my school next year.	2	Cx administrators (N = 10)	2	2	5	1
	3	Cx administrators (N = 9)	1	3	5	0
I think teachers in my school would support a career ladder program.	2	Cx administrators (N = 10)	2	3	3	1
	3	Cx administrators (N = 9)	0	4	5	0
There would be support from school leadership (e.g., principal, vice principal, teacher leader) to implement a career ladder program.	2	Cx administrators (N = 10)	2	3	4	1
	3	Cx administrators (N = 9)	1	3	5	0

*These questions were asked only of administrators *not* participating in any career-ladder programs within the state.

Administrators who were selected as a part of the comparison group school districts were also asked about their perspectives on a variety of career-ladder-related issues. A summary of their findings are described below.

- **Wanting a career ladder program in school.** Comparison administrators were almost evenly divided across both survey rounds in their level of agreement and disagreement with wanting a career-ladder program in their schools. For example, four principals in the third round stated that they strongly disagreed or disagreed with the statement but five stated they agreed.
- **Teacher support of pay-for-performance program in schools.** Survey findings also indicate an even split among administrators in their belief that teachers within their schools would be supportive of a career-ladder program. For example, nine administrators from both the second and the third surveys stated they strongly agreed or agreed with the statement, and the same number indicated a lack of support among their faculty.
- **Leadership support of pay-for-performance program in schools.** Findings related to administrators’ belief that school leadership personnel support of a career-ladder program mirrored closely those respondents who noted their lack of support of a pay-for-performance program in their schools. Administrators in survey rounds 2 and 3 (n = 9 for the two surveys combined) expressed disagreement (strongly disagree and disagree) with the suggestion that there would be support from their school leadership.

Administrator’s Use of Student Achievement Data

Table E13. How Student Achievement Data Is Used by Administrators

<i>As a school principal, I use student achievement data to work collaboratively with teachers to...</i>			Not at All (<i>n</i>)	To a Minimum Extent (<i>n</i>)	To a Moderate Extent (<i>n</i>)	To a Great Extent (<i>n</i>)
Prompt	Round	Administrator Response <i>N</i>				
Build knowledge around the use and purpose of student achievement data.	1	Tx administrators (<i>N</i> = 7)	0	0	4	3
	2	Tx administrators (<i>N</i> = 8)	0	0	4	4
		Cx administrators (<i>N</i> = 10)	0	1	5	4
	3	Tx administrators (<i>N</i> = 5)	0	0	2	3
		Cx administrators (<i>N</i> = 9)	0	1	4	4
Identify individual students who need assistance.	1	Tx administrators (<i>N</i> = 7)	0	0	1	6
	2	Tx administrators (<i>N</i> = 8)	0	0	0	8
		Cx administrators (<i>N</i> = 10)	0	0	1	9
	3	Tx administrators (<i>N</i> = 5)	0	0	1	4
		Cx administrators (<i>N</i> = 9)	0	1	3	5
Assign or reassign students to classes or groups.	1	Tx administrators (<i>N</i> = 7)	0	0	2	5
	2	Tx administrators (<i>N</i> = 8)	0	0	5	3
		Cx administrators (<i>N</i> = 10)	1	2	2	5
	3	Tx administrators (<i>N</i> = 5)	0	0	2	3
		Cx administrators (<i>N</i> = 9)	0	2	3	4
Identify and correct gaps in the curriculum for all students.	1	Tx administrators (<i>N</i> = 7)	0	0	4	3
	2	Tx administrators (<i>N</i> = 8)	0	1	5	2
		Cx administrators (<i>N</i> = 10)	0	0	5	5
	3	Tx administrators (<i>N</i> = 5)	0	0	4	1
		Cx administrators (<i>N</i> = 9)	1	0	4	4

<i>As a school principal, I use student achievement data to work collaboratively with teachers to...</i>			Not at All (<i>n</i>)	To a Minimum Extent (<i>n</i>)	To a Moderate Extent (<i>n</i>)	To a Great Extent (<i>n</i>)
Prompt	Round	Administrator Response <i>N</i>				
Identify areas where teachers need to strengthen their instruction.	1	Tx administrators (<i>N</i> = 7)	0	0	4	3
	2	Tx administrators (<i>N</i> = 8)	0	2	4	2
		Cx administrators (<i>N</i> = 10)	0	2	4	4
	3	Tx administrators (<i>N</i> = 5)	0	1	2	2
		Cx administrators (<i>N</i> = 9)	0	0	6	3
Set school improvement goals.	1	Tx administrators (<i>N</i> = 7)	0	0	1	6
	2	Tx administrators (<i>N</i> = 8)	0	0	1	7
		Cx administrators (<i>N</i> = 10)	0	0	3	7
	3	Tx administrators (<i>N</i> = 5)	0	0	2	3
		Cx administrators (<i>N</i> = 9)*	0	1	2	5

*One response was missing for this question.

The use of student achievement data by school districts and administrators to inform school decisions such as where to improve instruction and how to identify struggling students is important to the long-term success of the school and raising student achievement. Administrators from both the comparison and pilot district sites were asked to describe the extent to which they use student achievement to work collaboratively with their teachers to improve a variety of school-related issues. A description of the findings is follows.

- **Build knowledge about use and purpose of student achievement data.** Principals from the Cedar Rapids, MOC–Floyd Valley, and Mount Pleasant school districts all noted that they tried to build knowledge about the use and purpose of student achievement data to a moderate or great extent. This was consistent across all three surveys. Similarly, the comparison group of administrators reported spending the same level of time doing the same thing. Only two principals from each of the second and third survey stated they engaged in this activity to a minimal extent.
- **Identify struggling students.** An overwhelming majority of administrators, across both district types (i.e., pilot vs. comparison) noted that they used student achievement data to identify individual students who need assistance to a great

extent. For example, all 20 pilot administrators that completed the survey across all three rounds identified greatly with this statement. Fourteen out of the 19 comparison administrators stated the same thing.

- **Assign students to classes or groups.** With the exception of three comparison administrators in round 2 and two pilot administrators in round 3 who noted that they did not use or only minimally used student achievement data to assign students to groups, administrators in general noted that they used the data to a moderate or great extent to inform this activity.
- **Identify and correct gaps in the curriculum.** Only one (comparison) administrator from survey round 3 admitted to not using student achievement data to identify and correct gaps in the curriculum. The remaining respondents of both comparison and pilot groups from across all survey rounds noted that they engaged in this activity to a moderate or great extent.
- **Identify areas of improvement for teacher instruction.** Across the two survey time points, administrators in the comparison group ($n = 17$) noted that they moderately or greatly took part in using student achievement data to help identify areas for improvement in teacher instruction. In addition, 17 pilot administrators selected the same response options across their three surveys.
- **Set school improvement goals.** The use of student achievement data to set improvement goals was identified by both pilot site and comparison school administrators as an activity that they engaged in greatly. In fact, in round 2, seven out of 8 pilot administrators and seven out of 10 comparison administrators selected this response option.

Perspectives on School Culture and Support

Table E14. School Culture and Support

<i>Rate the degree to which you agree or disagree with the following statements about culture and support at your school.</i>		Strongly Disagree (n)	Disagree (n)	Agree (n)	Strongly Agree (n)	
	Round	Administrator Response N				
There is an atmosphere of trust and mutual respect amongst staff, teachers, and students in my school.	1	Tx administrators (N = 7)	0	1	4	2
	2	Tx administrators (N = 8)	0	0	8	0
		Cx administrators (N = 10)	0	0	7	3
	3	Tx administrators (N = 5)	0	1	3	1
		Cx administrators (N = 9)	0	0	5	4
My school culture fosters collegiality among all teachers.	1	Tx administrators (N = 7)	0	2	4	1
	2	Tx administrators (N = 8)	0	1	4	3
		Cx administrators (N = 10)	0	0	6	4
	3	Tx administrators (N = 5)	0	1	2	2
		Cx administrators (N = 9)	0	0	7	2
My school provides regularly scheduled times (i.e., at least once a week) for team meetings and professional collaborations.	1	Tx administrators (N = 7)	0	0	3	4
	2	Tx administrators (N = 8)	0	1	1	6
		Cx administrators (N = 10)	0	1	4	5
	3	Tx administrators (N = 5)	0	0	1	4
		Cx administrators (N = 9)	0	2	3	4

<i>Rate the degree to which you agree or disagree with the following statements about culture and support at your school.</i>			Strongly Disagree (n)	Disagree (n)	Agree (n)	Strongly Agree (n)
	Round	Administrator Response N				
Teachers at my school regularly receive feedback (at least once a month) from the principal, mentors, or colleagues (that is, evaluations, observations, etc.) to help them improve their teaching.	1	Tx administrators (N = 7)	0	5	2	0
	2	Tx administrators (N = 8)	0	2	5	1
		Cx administrators (N = 10)	0	3	6	1
	3	Tx administrators (N = 5)	0	2	3	0
		Cx administrators (N = 9)	0	1	4	4
Teachers and staff members at my school consistently work together (at least every two weeks) to solve school-related issues or problems.	1	Tx administrators (N = 7)	0	1	4	2
	2	Tx administrators (N = 8)	0	0	5	3
		Cx administrators (N = 10)	0	1	3	6
	3	Tx administrators (N = 5)	0	1	2	2
		Cx administrators (N = 9)	0	2	2	5

To assess school culture and support at their schools, all administrators were asked the extent to which they agreed or disagreed with the following five statements.

- Atmosphere of trust and mutual respect.** When asked whether there is an atmosphere of mutual trust and respect among faculty and staff in the school, the majority of administrators in both the comparison and pilot districts agreed or strongly agreed with this statement. Only two administrators—both from the pilot sites, in survey rounds 1 and 3—indicated that this was not the case at their schools.
- Collegiality among all teachers.** Respondents were asked whether they agreed or disagreed with the statement that asked whether their schools fostered collegiality among their faculty. None of the comparison administrators noted that this was a problem or concern at their schools. Although a small number, four administrators (two in round 1, one in round 2, and one in round 3) from participating pilot districts did state that they disagreed with the statement.
- Regularly scheduled time for team meetings and collaborations.** When asked whether their schools provided regularly scheduled (described as having at least one weekly) meeting for faculty collaboration, 19 out of the 20 pilot administrators who

took part in all three surveys stated they agreed or strongly agreed with the statement. Likewise, 16 out of the 19 comparison administrators responded in kind.

- **Regular feedback provided by principal and faculty.** Receiving feedback from a principal—via observations, face-to-face meetings, etc.—is important to teachers in that it allows them to identify areas for improvement and make changes to instruction and encourages open lines of communication. When asked whether they provided their faculty with regular (e.g., monthly) feedback, survey results reveal that nine out of the 20 pilot administrators who participated in one of the three surveys stated they disagreed with this statement. The remaining 11 respondents expressed varying degrees of agreement. In contrast, only four comparison administrators stated that they did not provide regular feedback to their teachers.
- **Consistent collaboration with teachers to solve school-related problems.** Across all survey rounds, only a handful of respondents from the comparison group ($n = 3$) and pilot group ($n = 2$) stated that they disagreed with the statement that asked whether they met every two weeks or less with their teachers to collaborate and solve school-related problems. The vast majority of administrators across both groups indicated that their schools did engage in such collaborative conversations.

Perspectives on School Leadership Expectations

Table E15. School Leadership Expectations

<i>Rate the degree to which you agree or disagree with the following statements about the expectations that you set for your school.</i>			Strongly Disagree (n)	Disagree (n)	Agree (n)	Strongly Agree (n)
Prompt	Round	Administrator Response N				
I try to articulate a clear vision that reflects the beliefs, values, and commitments of the school community.	1	Tx administrators (N = 7)	0	0	3	4
	2	Tx administrators (N = 8)	0	0	5	3
		Cx administrators (N = 10)	0	0	3	7
	3	Tx administrators (N = 5)	0	0	2	3
		Cx administrators (N = 9)	0	0	3	6
I work to build consensus among all members of the school community (i.e., students, teachers, parents, and staff) around a shared vision.	1	Tx administrators (N = 7)	0	0	5	2
	2	Tx administrators (N = 8)	0	0	6	2
		Cx administrators (N = 10)	0	0	5	5
	3	Tx administrators (N = 5)	0	0	5	0
		Cx administrators (N = 9)	0	0	4	5
I set high standards for all teachers in my school.	1	Tx administrators (N = 7)	0	0	4	3
	2	Tx administrators (N = 8)	0	0	4	4
		Cx administrators (N = 10)	0	0	4	6
	3	Tx administrators (N = 5)	0	0	3	2
		Cx administrators (N = 9)	0	0	3	6

<i>Rate the degree to which you agree or disagree with the following statements about the expectations that you set for your school.</i>			Strongly Disagree (n)	Disagree (n)	Agree (n)	Strongly Agree (n)
Prompt	Round	Administrator Response N				
I have high academic expectations and standards for all students in my school.	1	Tx administrators (N = 7)	0	0	5	2
	2	Tx administrators (N = 8)	0	0	4	4
		Cx administrators (N = 10)	0	0	3	7
	3	Tx administrators (N = 5)	0	0	2	3
		Cx administrators (N = 9)	0	0	2	7
I have set clear goals for school improvement.	1	Tx administrators (N = 7)	0	2	4	1
	2	Tx administrators (N = 8)	0	0	8	0
		Cx administrators (N = 10)	0	0	3	7
	3	Tx administrators (N = 5)	0	0	2	3
		Cx administrators (N = 9)	0	0	4	5
I regularly review (i.e., monthly) student achievement data.	1	Tx administrators (N = 7)	0	0	6	1
	2	Tx administrators (N = 8)	0	1	6	1
		Cx administrators (N = 10)	0	3	3	4
	3	Tx administrators (N = 5)	0	1	1	3
		Cx administrators (N = 9)	0	3	1	5

<i>Rate the degree to which you agree or disagree with the following statements about the expectations that you set for your school.</i>			Strongly Disagree (n)	Disagree (n)	Agree (n)	Strongly Agree (n)
Prompt	Round	Administrator Response N				
I regularly (i.e., monthly) evaluate the effectiveness of programs or initiatives within the school.	1	Tx administrators (N = 7)	0	3	4	0
	2	Tx administrators (N = 8)	0	1	7	0
		Cx administrators (N = 10)	0	2	5	3
	3	Tx administrators (N = 5)	0	1	3	1
		Cx administrators (N = 9)	0	3	1	5
I use feedback from teachers, students, and the community to evaluate the effectiveness of programs or initiatives.	1	Tx administrators (N = 7)	0	1	5	1
	2	Tx administrators (N = 8)	0	0	5	3
		Cx administrators (N = 10)	0	1	5	4
	3	Tx administrators (N = 5)	0	1	4	0
		Cx administrators (N = 9)	0	1	5	3

*Some respondents did not answer all questions.

To assess how or if principals set expectations for their schools, administrators were asked to rate the extent to which they agreed or disagreed with an assortment of activities related to establishing school level expectations. A summary of these findings are highlighted here:

- When asked whether they engaged in the following activities—articulating a clear vision, building consensus among all members of the school community around a shared vision, setting high standards for all teachers, establishing high academic standards for all students, and setting clear goals—all administrators, both pilot and comparison, except two pilot administrators in the first survey round, stated they agreed or strongly agreed with each statement.
- Notwithstanding, when asked whether they took part in the following activities monthly—reviewing student achievement data and evaluating the effectiveness of programs and initiatives—a small number of administrators from both survey groups across all survey rounds indicated they did not. Overall, however, both sets of respondents indicated some level of agreement with these statements.

Perspectives on Professional Development

Table E16. Setting Professional Development Expectations

<i>Rate the degree to which you agree or disagree with the following statements about the expectations that you set for your school.</i>			Strongly Disagree (n)	Disagree (n)	Agree (n)	Strongly Agree (n)
Prompt	Round	Administrator Response N				
Professional development opportunities allow my teachers to work on aspects of their teaching that they are trying to improve.	1	Tx administrators (N = 7)	0	1	2	4
	2	Tx administrators (N = 8)	0	0	5	3
		Cx administrators (N = 10)	0	0	6	4
	3	Tx administrators (N = 5)	0	0	3	2
		Cx administrators (N = 9)	0	0	5	4
Professional development opportunities provide my teachers with time to learn about evidence-based practices.	1	Tx administrators (N = 7)	0	0	4	3
	2	Tx administrators (N = 8)	0	0	7	1
		Cx administrators (N = 10*)	0	0	6	3
	3	Tx administrators (N = 5)	0	0	2	3
		Cx administrators (N = 9)	0	0	5	4
There are sufficient funds and resources available at my school to allow teachers to take advantage of high-quality professional development activities.	1	Tx administrators (N = 7)	2	2	1	2
	2	Tx administrators (N = 8)	0	3	5	0
		Cx administrators (N = 10)	1	2	5	2
	3	Tx administrators (N = 5)	1	2	2	0
		Cx administrators (N = 9)	0	1	5	3

<i>Rate the degree to which you agree or disagree with the following statements about the expectations that you set for your school.</i>			Strongly Disagree (<i>n</i>)	Disagree (<i>n</i>)	Agree (<i>n</i>)	Strongly Agree (<i>n</i>)
Prompt	Round	Administrator Response <i>N</i>				
As school principal, I encourage teachers to take advantage of professional development opportunities.	1	Tx administrators (<i>N</i> = 7)	0	0	1	6
	2	Tx administrators (<i>N</i> = 8)	0	0	2	6
		Cx administrators (<i>N</i> = 10)	0	0	3	7
	3	Tx administrators (<i>N</i> = 5)	0	0	1	4
		Cx administrators (<i>N</i> = 9)	0	0	2	7

*One response was missing for this question.

When asked to identify the extent to which they agreed or disagreed with whether they set forth expectations on the importance and usefulness on a variety of professional development activities, findings across the survey rounds illuminated the following:

- Administrators from both the pilot and comparison districts all noting varying levels of agreement (i.e., strongly agree or agree) with statements pertaining to their expectation of the following professional development activities: (1) professional development opportunities allow teachers to work on aspects of their teaching that need improvement and (2) professional development opportunities provide teachers with time to learn about evidence-based practices. For example, all administrators except one pilot administrator, from both pilot and comparison groups and all survey rounds, stated they agreed or strongly agreed with both statements.
- When asked whether there are sufficient resources at the school to allow teachers to participate in professional development activities, 10 (out of 20) pilot teachers from across three survey administrations and four (out of 19) comparison administrators disagreed. In fact, three pilot administrators (from survey rounds 1 and 3) strongly disagreed with the statement. In general, more than half of all administrators across both survey groups indicated their schools had sufficient resources.

Table E17. Level of Satisfaction With Teacher Professional Development

<i>Overall, how satisfied are you with the level of professional development that teachers in your school currently receive?</i>		Very Dissatisfied (n)	Somewhat Dissatisfied (n)	Satisfied (n)	Very Satisfied (n)
Round	Administrator Response N				
1	Tx administrators* (N = 7)	0	2	4	1
2	Tx administrators (N = 8)	0	1	7	—
	Cx administrators** (N = 10)	0	0	6	4
3	Tx administrators (N = 5)	0	0	3	2
	Cx administrators (N = 9)	0	0	5	4

In general, administrators from the three pilot sites reported being satisfied or very satisfied with the level of professional development their teachers receive across all three surveys. This finding was also reflected by the comparison group of principals during their second and third survey administrations. Only two pilot administrators from the first round and one from the second round indicated that they were somewhat dissatisfied.

Table E18. Looking Back

<i>Rate the extent to which you agree or disagree with the following statements about your school <u>when compared with last year</u> (i.e., 2007–08 academic school year).</i>			Strongly Disagree (n)	Disagree (n)	Agree (n)	Strongly Agree (n)
Prompt	Round	Administrator Response N				
There is greater student engagement at my school.	1	Tx administrators (N = 7)	0	0	5	2
	2	Tx administrators (N = 8)	0	1	7	—
		Cx administrators (N = 10)	0	0	8	2
	3	Tx administrators (N = 5)	0	0	5	—
		Cx administrators (N = 9)	0	1	6	2

<i>Rate the extent to which you agree or disagree with the following statements about your school <u>when compared with last year</u> (i.e., 2007–08 academic school year).</i>			Strongly Disagree (n)	Disagree (n)	Agree (n)	Strongly Agree (n)
Prompt	Round	Administrator Response N				
Teachers at my school are more open to learn new instructional strategies.	1	Tx administrators (N = 7)	0	1	4	2
	2	Tx administrators (N = 8)	0	0	5	3
		Cx administrators (N = 10)	0	0	10	0
	3	Tx administrators (N = 5)	0	0	2	3
		Cx administrators (N = 9)	0	1	5	3
Teachers at my school are more frequently using student achievement data to inform decision making.	1	Tx administrators (N = 7)	0	0	1	6
	2	Tx administrators (N = 8)	0	0	2	6
		Cx administrators (N = 10)	0	2	6	2
	3	Tx administrators (N = 5)	0	0	2	3
		Cx administrators (N = 9)	0	1	5	3
Teachers at my school are more satisfied with professional development activities.	1	Tx administrators (N = 7)	0	1	5	1
	2	Tx administrators (N = 8)	0	1	5	2
		Cx administrators (N = 10)	0	0	9	1
	3	Tx administrators (N = 5)	0	0	4	1
		Cx administrators (N = 9)	0	0	7	2
Students' standardized test scores have improved at my school.	1	Tx administrators (N = 7)	0	2	5	0
	2	Tx administrators (N = 8)	1	3	2	2
		Cx administrators (N = 10)	0	1	6	3
	3	Tx administrators (N = 5)	0	3	2	0
		Cx administrators (N = 9)	0	4	5	0

*Administrators who completed the survey in round 3 were asked to reflect back on the 2008–09 academic school year.

To gauge administrators' perspectives during three time points during the year (February, April, and September 2009), respondents were asked to rate the extent to which they agreed or disagreed with several statements related to how various school-related activities or initiatives have (or have not) improved in comparison to the prior school year (e.g., 2007–08). Findings from the three surveys were as follows:

- As a whole, both administrator groups (pilot and comparison) reported at each survey administration that they strongly agreed or agreed that their schools had improvements—in comparison to the year prior—in the following areas: student engagement, more frequent use of student achievement data by teachers to inform decision making, and higher levels of satisfaction from professional development activities by teachers.
- Notwithstanding, when asked whether students' standardized test scores have improved at their schools from the year before, six (out of 15) pilot administrators from the first and second survey time points noted that their schools standardized tests scores had not improved since 2007–08.
- When asked to reflect on the 2008–09 year in round 3, three pilot principals noted no improvement in students' standardized test scores. Likewise, administrators in the comparison group (round 2: $n = 1$; round 3: $n = 4$) also indicated disagreement with the statement that “students' standardized test scores have improved at my school.” Nevertheless, most administrators across both survey groups noted improvement in student test scores from year to year.

Table E19. Administrator Mobility

<i>Are you still teaching at the same school you taught last academic school year?*</i>		Yes (<i>n</i>)	No (<i>n</i>)
Round	Administrator Response <i>N</i>		
3	Tx administrators ($N = 5$)	5	—
	Cx administrators ($N = 9$)	9	—

*This item was asked only of treatment and comparison administrators in the third round of survey administration once the new 2009–10 academic year had started.

To assess administrator mobility, respondents were asked if in September 2009 at the start of the new school year whether they were still teaching (administrating) at the same school as the year prior. As results in Table E19 reveal, all administrators who completed this final survey remained in the same school. No principals retired or were transferred between schools.

Appendix F

Teacher Survey: Tables and Findings

General School and Teacher Information

Table F1. Teaching at the Same School*

<i>Are you still teaching at the same school you taught last academic year?*</i>		Yes (n)	No (n)
Round	Teacher Response (N)		
3	Comparison (N = 181)	97.2%	2.8%
	Cedar Rapids (N = 14)	92.9%	7.1%
	MOC–Floyd Valley (N = 32)	90.6%	9.4%
	Mount Pleasant (N = 21)	100.0%	0.0%

*This question was asked in the dissemination of the third round of surveys only.

To gauge teacher mobility between the second and third survey administration, respondents were asked whether they were still teaching at the same school as during the prior school year. more than 90 percent or more of the respondents stated that they had *not* changed school. For example, Mount Pleasant school district retained 100 percent of its teachers.

Table F2. Years of Teaching at Current School

<i>Including this new school year, how long have you been teaching at your current school?</i>		This Is My First Year (%)	More Than One but Less Than Five Years (%)	Longer Than Five Years (%)
Round	Teacher Response N			
1	Cedar Rapids (N = 36)	27.8%	38.9%	33.3%
	MOC–Floyd Valley (N = 49)	4.1%	22.4%	73.5%
	Mount Pleasant (N = 26)	19.2%	15.4%	65.4%

<i>Including this new school year, how long have you been teaching at your current school?</i>		This Is My First Year (%)	More Than One but Less Than Five Years (%)	Longer Than Five Years (%)
Round	Teacher Response <i>N</i>			
2	Comparison (<i>N</i> = 212)	9.9%	21.7%	68.4%
	Cedar Rapids (<i>N</i> = 31)	29.0%	25.8%	45.2%
	MOC–Floyd Valley (<i>N</i> = 52)	9.6%	23.1%	67.3%
	Mount Pleasant (<i>N</i> = 23)	21.7%	17.4%	60.9%
3	Comparison (<i>N</i> = 181)	1.7%	22.1%	76.2%
	Cedar Rapids (<i>N</i> = 14)	0%	28.6%	71.4%
	MOC–Floyd Valley (<i>N</i> = 32)	0%	25.0%	75.0%
	Mount Pleasant (<i>N</i> = 21)	0%	38.1%	61.9%

When asked about the length of time teachers have been teaching in their current schools across the three survey time points, findings from the survey reveal the following:

- 38.9 percent of teachers in Cedar Rapids who completed the first survey in February had between two and five years of tenure at their current school. Approximately 33 percent had more than five years. In later survey administrations, teachers who completed these surveys reported having more than five years at the same school (45.2 percent and 71.4 percent).
- Likewise, for both the MOC–Floyd Valley (73.5 percent, 67.3 percent, and 75 percent) and Mount Pleasant (65.4 percent, 60.9 percent, and 61.9 percent) school districts as well as for comparison schools (68.4 percent and 76.2 percent), a larger proportion of respondents for each district and across survey administrations reported having five or more years working at their current school.

Table F3. Total Number Years of Teaching Experience

<i>Including this year (2009–10), how many <u>total</u> years of teaching experience do you have?</i>		Less Than 2 Years (%)	2 to 5 Years (%)	More Than 5 Years (%)
Round	Teacher Response (N)			
1	Cedar Rapids (N = 36)	2.8%	30.6%	66.7%
	MOC–Floyd Valley (N = 49)	2.0%	8.2%	89.8%
	Mount Pleasant (N = 26)	3.8%	11.5%	84.6%
2	Comparison (N = 212)	4.2%	12.7%	83.0%
	Cedar Rapids (N = 31)	6.5%	22.6%	71.0%
	MOC–Floyd Valley (N = 52)	5.8%	13.5%	80.8%
	Mount Pleasant (N = 23)	4.3%	13.0%	82.6%
3	Comparison (N = 181)	2.8%	7.7%	89.5%
	Cedar Rapids (N = 14)	0%	21.4%	78.6%
	MOC–Floyd Valley (N = 32)	0%	15.6%	84.4%
	Mount Pleasant (N = 21)	0%	9.5%	90.5%

To determine how many years of total teaching experience teachers have (regardless of whether they taught at the same school) throughout their career, survey data indicated the following:

- Across all three survey groups (Cedar Rapids, MOC–Floyd Valley, and Mount Pleasant) from approximately 67 percent to more than 89 percent of teachers participating in the pilot program during round 1 of the survey had six or more years under their belts.
- Three of the four district sites—MOC–Floyd Valley being the exception, which had a 9 percent decrease, from 89.8 percent to 80.8 percent—had an increase in the number of teachers who reported having five or more years of overall experience between the first and second surveys.
- In general, less than 7 percent of any districts reported having any beginning teachers in their classrooms across the three surveys.

Table F4. Self-Reported Grade Levels

<i>What grade(s) do you teach?*</i>				
Round	Teacher Response (N)	Elementary (P-5) %	Middle or Junior High School (6-8) %	High School (9-12) %
1	Cedar Rapids (N = 36)	100.0%	0.0%	0.0%
	MOC-Floyd Valley (N = 49)	42.9%	40.8%	24.5%
	Mount Pleasant (N = 26)	61.5%	38.5%	0.0%
2	Comparison (N = 212)	50.0%	43.9%	27.4%
	Cedar Rapids (N = 31)	100.0%	0.0%	0.0%
	MOC-Floyd Valley (N = 52)	51.9%	26.9%	26.9%
	Mount Pleasant (N = 23)	56.5%	43.5%	0.0%
3	Comparison (N = 181)	45.3%	45.9%	24.9%
	Cedar Rapids (N = 14)	100.0%	0.0%	0.0%
	MOC-Floyd Valley (N = 32)	43.8%	37.5%	31.3%
	Mount Pleasant (N = 21)	61.9%	42.9	4.8%

*Totals may not equal N's because respondents could select more than one grade level.

When asked to self-report which grade level(s) they taught, results from the three teacher surveys indicate the following:

- 100 percent of all Cedar Rapids teachers, from across all three survey time points, indicated that they work with students from prekindergarten through fifth grade.
- Across all three surveys, between 61 percent (rounds 1 and 3) and 57 percent (round 2) of Mount Pleasant teachers who completed one of the surveys reported working in an elementary school. Fewer Mount Pleasant teachers reported teaching students in Grades 6–8 (e.g., 38.5 percent, 43.5 percent, and 42.9 percent) and only one teacher in the third round reported working at the high school level.
- Teachers from the comparison group and MOC-Floyd Valley had similar breakouts, with approximately a quarter of their respondents (e.g., round 2) indicating that they worked in high school and around 50 percent working at the primary level. The remaining respondents reported that they worked at the middle school level.

Table F5. Self-Reported Subject Areas

<i>What subject(s) do you teach?*</i>		Reading/ Language Arts (%)	Foreign Language (%)	Mathematics (%)	Science (%)	Social Studies (%)	Special Education (%)	Other** (%)
Survey Round	Teacher Response (N)							
1	Cedar Rapids (N = 36)	94.4%	2.8%	94.4%	91.7%	91.7%	16.7%	13.9%
	MOC–Floyd Valley (N = 49)	46.9%	0.0%	28.6%	32.7%	38.8%	8.2%	32.7%
	Mount Pleasant (N = 26)	69.2%	0.0%	57.7%	42.3%	42.3%	15.4%	15.4%
2	Comparison (N = 212)	49.1%	0.9%	44.8%	34.4%	35.4%	23.6%	27.8%
	Cedar Rapids (N = 31)	93.5%	3.2%	93.5%	93.5%	87.1%	10.0%	6.5%
	MOC–Floyd Valley (N = 52)	53.8%	1.9%	50.0%	42.3%	38.5%	17.3%	23.1%
	Mount Pleasant (N = 23)	73.9%	0.0%	56.5%	34.8%	34.8%	17.4%	13.0%
3	Comparison (N = 181)	47.5%	3.3%	35.4%	29.3%	34.3%	12.7%	34.3%
	Cedar Rapids (N = 14)	92.9%	0.0%	92.9%	92.9%	92.9%	14.3%	28.6%
	MOC–Floyd Valley (N = 32)	50.0%	3.1%	32.3%	31.3%	40.6%	12.5%	21.9%
	Mount Pleasant (N = 21)	61.9%	0.0%	52.4%	38.1%	38.1%	19.0%	14.3%

*Totals may not equal N's because respondents could select more than one subject area.

**Other subjects taught included art, gifted and talented, health, physical education, music/band, agriculture, business, computer/technology, driver education, media, handwriting, phonics/language, English language learners, handwriting, social skills, advanced placement U.S. history, instructional coaching, elementary school counselor, and teacher librarian.

Teachers from across all four stakeholder groups were asked to report which subjects they were responsible for teaching. A summary of the survey data shows the following:

- As noted earlier, 100 percent of the teachers in Cedar Rapids identify themselves as elementary teachers (e.g., Grades P–5). As a result, more than 90 percent of Cedar Rapids teachers across each survey reported that they taught the following subject areas: language arts, mathematics, science, and social studies. Between 8 percent (round 1) and 14 percent (round 3) indicated that they also taught special education.
- In MOC–Floyd Valley, only two subjects—language arts and mathematics—garnered more than a 50 percent response rate and only in rounds 2 and 3. Most subject areas garnered response rates between 30 and 40 percent.
- For the Mount Pleasant school district, between 60 percent (round 3) and 74 percent (round 2) of teachers reported that they were language arts teachers. This was followed by more than 50 percent of teachers noting across all three surveys that they also taught mathematics. Approximately 30 percent (rounds 2 and 3) to more than 40 percent (round 1) of teachers also indicated that they taught science and social studies.
- For comparison group teachers, the most common subjects taught as identified across the second and third round surveys included language arts (47.5 percent and 49.1 percent), mathematics (44.8 percent and 35.4 percent), social studies (35.4 percent and 34.3 percent), and science (34.4 percent and 29.3 percent).
- Finally, no more than 3.3 percent of teachers in any district and across any survey administration stated they also taught a foreign language course.

Table F6. Grade Levels at Current School

<i>What are the grade level(s) at your school?*</i>		Elementary (P–5) (%)	Middle or Junior High School (6– 8) (%)	High School (9–12) (%)
Round	Teacher Response (N)			
1	Cedar Rapids (N = 36)	100.0%	19.4%	0.0%
	MOC–Floyd Valley (N = 49)	46.9%	42.9%	24.5%
	Mount Pleasant (N = 26)	61.5%	38.5%	0.0%
2	Comparison (N = 212)	57.1%	55.7%	31.6%
	Cedar Rapids (N = 31)	100.0%	12.9%	0.0%
	MOC–Floyd Valley (N = 52)	53.8%	26.9%	28.8%
	Mount Pleasant (N = 23)	56.5%	43.5%	0.0%
3	Comparison (N = 181)	53.3%	54.7%	26.1%
	Cedar Rapids (N = 14)	100.0%	21.4%	0.0%
	MOC–Floyd Valley (N = 32)	43.8%	35.5%	34.4%
	Mount Pleasant (N = 21)	57.1%	42.9%	4.8%

*Totals may not equal N's because respondents could select more than one grade level.

Respondents were asked during each survey administration to identify the grade levels within their respective schools. A breakdown of the survey findings reveal:

- More than 55 percent of comparison teachers in survey round 2 work in elementary or middle schools. Nearly a third of these teachers work in high schools.
- 100 percent of teachers who took part in at least one of the three surveys from Cedar Rapids reported working in elementary schools but from 12.9 percent (round 2) to as many as 21.2 percent (round 3) also work in middle schools (Grades 6–8).
- In the MOC–Floyd Valley and Mount Pleasant school districts, a higher percentage of teachers in rounds 1 through 3 reported working in elementary schools. For example, 56.5 percent of Mount Pleasant teachers and 53.8 percent of MOC–Floyd Valley teachers in round 2 selected this option. Overall, slightly fewer respondents from both districts reported working in middle

schools (e.g., about 35 percent of Mount Pleasant teachers in Round 3 and about 43 percent of MOC–Floyd Valley teachers) and even fewer in high schools (e.g., 0 percent of Mount Pleasant and 24 percent of MOC–Floyd Valley teachers in round 1).

Table F7. Number of Students Enrolled

<i>Approximately how many students are enrolled in your school?*</i>		Fewer Than 50 (%)	50 to 100 (%)	101 to 200 (%)	201 to 300 (%)	301 to 400 (%)	401 to 500 (%)	501 or More (%)	Do Not Know
Round	Teacher Response (N)								
1	Cedar Rapids (N = 36)	0.0%	0.0%	0.0%	25.0%	44.4%	16.7%	11.1%	2.8%
	MOC–Floyd Valley (N = 49)	0.0%	2.0%	8.2%	22.4%	32.7%	16.3%	14.3%	4.1%
	Mount Pleasant (N = 26)	0.0%	0.0%	0.0%	61.5%	0.0%	26.9%	7.7%	3.8%
2	Comparison (N = 212)	0.0%	0.0%	2.4%	28.3%	42.5%	15.6%	9.0%	2.4%
	Cedar Rapids (N = 31)	0.0%	0.0%	0.0%	35.5%	35.5%	22.6%	6.5%	0.0%
	MOC–Floyd Valley (N = 52)	0.0%	0.0%	15.4%	17.3%	28.8%	25.0%	7.7%	5.8%
	Mount Pleasant (N = 23)	0.0%	0.0%	8.7%	43.5%	4.3%	30.4%	8.7%	4.3%
3	Comparison (N = 181)	0.6%	0.0%	1.1%	18.8%	43.1%	23.2%	11.0%	2.2%
	Cedar Rapids (N = 14)	0.0%	0.0%	0.0%	35.7%	35.7%	28.6%	0.0%	0.0%
	MOC–Floyd Valley (N = 32)	0.0%	0.0%	9.4%	18.8%	25.0%	31.3%	12.5%	3.1%
	Mount Pleasant (N = 21)	0.0%	0.0%	19.0%	33.3%	0.0%	23.8%	23.8%	0.0%

To gauge the size of the student population within each district, respondents were asked to provide a breakdown of the student population at their schools. Survey findings illustrate the following:

- None of the four district sites had fewer than 100 students enrolled in a school with the exception of two teachers—one from the MOC–Floyd Valley (round 1) and another from a comparison school district (round 3).

- 25 to 35 percent (see survey rounds 1–3) of teachers from Cedar Rapids reported that their schools has approximately 201 to 300 students; slightly higher percentages (35 to more than 44 percent) note that 301 to 400 students are enrolled in their schools.
- Teachers in the comparison school districts reported student enrollments similar to those in Cedar Rapids. For example, about 43 percent of comparison teachers in survey rounds 2 and 3 reported working in schools of 301 to 400 students.
- In contrast, between 17 percent (round 2) and 22 percent (round 1) of MOC–Floyd Valley teachers reported student enrollments of 201 to 300 students. A slightly higher percentage (25 percent and 33 percent from rounds 3 and 1, respectively) indicated enrollments of 301 to 400 students. In the third round of the survey, more than 40 percent of respondents indicated that their school’s population exceeded 401 students. Only 14.3 percent of teachers from round 1 stated their schools had more than 501 students.
- As many as 61.5 percent of Mount Pleasant school teachers in round 1 indicated that their schools had a student population of no more than 300 students. This percentage increased after each of the remaining surveys. About a third of the respondents (30.4 percent in round 2 and 31.3 percent in round 3) noted enrollments of 500 students. Teachers who reported populations of 501 or more students varied from as low as 8 percent (rounds 1 and 2) to as high as 23 percent in round 3.

Table F8. Number of Full-Time Teachers Employed at Your School

<i>Approximately how many full-time teachers are currently employed at your school?</i>		Fewer Than 20 (%)	21 to 50 (%)	51 to 75 (%)	76 to 100 (%)	101 or More (%)	Do Not Know
Round	Teacher Response (N)						
1	Cedar Rapids (N = 36)	22.2%	61.1%	13.9%	0.0%	0.0%	2.8%
	MOC–Floyd Valley (N = 49)	10.2%	71.4%	2.0%	8.2%	4.1%	4.1%
	Mount Pleasant (N = 26)	57.7%	38.5%	3.8%	0.0%	0.0%	0.0%
2	Comparison (N = 212)	9.4%	76.4%	5.2%	2.4%	2.4%	4.2%
	Cedar Rapids (N = 31)	19.4%	64.5%	12.9%	3.2%	0.0%	0.0%
	MOC–Floyd Valley (N = 52)	17.3%	61.5%	1.9%	5.8%	3.8%	9.6%
	Mount Pleasant (N = 23)	39.1%	52.2%	4.3%	0.0%	0.0%	4.3%

<i>Approximately how many full-time teachers are currently employed at your school?</i>		Fewer Than 20 (%)	21 to 50 (%)	51 to 75 (%)	76 to 100 (%)	101 or More (%)	Do Not Know
Round	Teacher Response (N)						
3	Comparison (N = 181)	11.6%	76.8%	5.0%	2.8%	0.6%	3.3%
	Cedar Rapids (N = 14)	28.6%	57.1%	14.3%	0.0%	0.0%	0.0%
	MOC–Floyd Valley (N = 32)	9.4%	65.6%	6.3%	3.1%	9.4%	0.0%
	Mount Pleasant (N = 21)	42.9%	52.4%	0.0%	0.0%	0.0%	4.8%

To assess faculty size, respondents were asked to identify the number of full-time teachers that work at their respective school. Data from the surveys reveal the following:

- For all districts—Cedar Rapids, MOC–Floyd Valley, Mount Pleasant (except in round 1: 38 percent), and comparison districts—more than half to more than three quarters of the respondents across all survey administrations indicated that that between 21 and 50 full-time teachers constitute their workforce.
- Only MOC–Floyd Valley and the comparison school districts had respondents who reported having more than 100 full-time faculty members.

Table F9. Subjects Most in Need of Improvement

<i>Which subject(s) in your school are students most in need of improvement?*</i>		Reading/ Language Arts (%)	Foreign Language (%)	Mathematics (%)	Science (%)	Social Studies (%)	Special Education (%)	Other** (%)
Round	Teacher Response (N)							
1	Cedar Rapids (N = 36)	97.2%	0.0%	77.8%	5.6%	11.1%	0.0%	2.8%
	MOC–Floyd Valley (N = 49)	28.6%	16.3%	49.0%	8.2%	16.3%	0.0%	10.2%
	Mount Pleasant (N = 26)	80.8%	0.0%	65.4%	7.7%	7.7%	0.0%	0.0%
2	Comparison (N = 212)	77.8%	9.0%	39.2%	17.9%	8.0%	0.0%	4.3%
	Cedar Rapids (N = 31)	93.5%	0.0%	64.5%	19.4%	9.7%	0.0%	3.2%

<i>Which subject(s) in your school are students most in need of improvement?*</i>		Reading/ Language Arts (%)	Foreign Language (%)	Mathematics (%)	Science (%)	Social Studies (%)	Special Education (%)	Other** (%)
Round	Teacher Response (N)							
	MOC–Floyd Valley (N = 52)	40.4%	13.5%	42.3%	15.4%	15.4%	0.0%	3.8%
	Mount Pleasant (N = 23)	95.7%	4.3%	78.3%	13.0%	4.3%	0.0%	0.0%
3	Comparison (N = 181)	83.4%	7.2%	45.9%	15.5%	11.0%	0.0%	5.5%
	Cedar Rapids (N = 14)	92.9%	0.0%	92.9%	7.1%	7.1%	0.0%	0.0%
	MOC–Floyd Valley (N = 32)	34.4%	12.5%	59.4%	18.8%	21.9%	0.0%	9.4%
	Mount Pleasant (N = 21)	85.7%	4.8%	81.0%	0.0%	4.8%	0.0%	0.0%

*Totals may not equal N's because respondents could select more than one subject area.

**Other subjects that were identified as being in need of improvement included social skills, inquiry, music, writing, behavioral issues, art, physical education.

When asked to identify the various subject areas that were most in need of academic improvement, the following was revealed:

- Regardless of district and survey round, teachers across all four sites identified the subject areas in need of most improvement as reading/language arts and mathematics. For example, in round 2, more than 93 percent of teachers in Cedar Rapids, 95 percent in Mount Pleasant, 40 percent in MOC–Floyd Valley, and 78 percent of comparison teachers selected language arts as an area of concern.
- Other subject areas that needed improvement were science, mathematics, writing, music, and physical education. No district site identified special education as an area in need of progress.

Student Achievement and Data Use

Table F10. Student Achievement and Data Use

<i>Indicate the extent to which student achievement and data are used to make the following types of decisions in your school.</i>			Not at All (%)	To a Minimum Extent (%)	To a Moderate Extent (%)	To a Great Extent (%)	Response Missing (%)
Prompt	Round	Teacher Response (N)					
Identifying individual students who need assistance.	1	Cedar Rapids (N = 36)	0.0%	0.0%	19.4%	72.2%	8.3%
		MOC–Floyd Valley (N = 49)	0.0%	2.0%	22.4%	73.5%	2.0%
		Mount Pleasant (N = 26)	0.0%	3.8%	50.0%	46.2%	0.0%
	2	Comparison (N = 212)	0.0%	2.8%	29.2%	63.2%	4.7%
		Cedar Rapids (N = 31)	0.0%	0.0%	19.4%	80.6%	0.0%
		MOC–Floyd Valley (N = 52)	0.0%	1.9%	23.1%	71.2%	3.8%
		Mount Pleasant (N = 23)	0.0%	0.0%	47.8%	47.8%	4.3%
	3	Comparison (N = 181)	0.0%	4.4%	16.0%	76.2%	3.3%
		Cedar Rapids (N = 14)	0.0%	0.0%	14.3%	85.7%	0.0%
		MOC–Floyd Valley (N = 32)	0.0%	3.1%	18.8%	78.1%	0.0%
		Mount Pleasant (N = 21)	0.0%	4.8%	19.0%	76.2%	0.0%

<i>Indicate the extent to which student achievement and data are used to make the following types of decisions in your school.</i>			Not at All (%)	To a Minimum Extent (%)	To a Moderate Extent (%)	To a Great Extent (%)	Response Missing (%)
Prompt	Round	Teacher Response (N)					
Assigning or reassigning students to classes or groups.	1	Cedar Rapids (N = 36)	0.0%	5.6%	36.1%	50.0%	8.3%
		MOC–Floyd Valley (N = 49)	4.1%	20.4%	44.9%	28.6%	2.0%
		Mount Pleasant (N = 26)	0.0%	19.2%	53.8%	26.9%	0.0%
	2	Comparison (N = 212)	3.3%	17.0%	38.2%	36.8%	4.7%
		Cedar Rapids (N = 31)	3.2%	19.4%	29.0%	48.4%	0.0%
		MOC–Floyd Valley (N = 52)	1.9%	28.8%	38.5%	25.0%	5.8%
		Mount Pleasant (N = 23)	4.3%	17.4%	52.2%	21.7%	4.3%
	3	Comparison (N = 181)	2.2%	8.3%	34.3%	51.4%	3.9%
		Cedar Rapids (N = 14)	0.0%	0.0%	42.9%	57.1%	0.0%
		MOC–Floyd Valley (N = 32)	0.0%	18.8%	46.9%	34.4%	0.0%
		Mount Pleasant (N = 21)	4.8%	4.8%	38.1%	52.4%	0.0%
	Identifying and correcting gaps in the curriculum for all students.	1	Cedar Rapids (N = 36)	0.0%	22.2%	36.1%	33.3%
MOC–Floyd Valley (N = 49)			0.0%	4.1%	46.9%	46.9%	2.0%
Mount Pleasant (N = 26)			3.8%	15.4%	53.8%	26.9%	0.0%
2		Comparison (N = 212)	2.8%	15.6%	45.3%	31.6%	4.7%
		Cedar Rapids (N = 31)	0.0%	23.3%	53.3%	23.3%	0.0%
		MOC–Floyd Valley (N = 52)	0.0%	7.7%	46.2%	42.3%	3.8%
		Mount Pleasant (N = 23)	0.0%	8.7%	52.2%	34.8%	4.3%
3		Comparison (N = 181)	1.1%	9.9%	42.5%	43.1%	3.3%
		Cedar Rapids (N = 14)	0.0%	14.3%	64.3%	21.4%	0.0%
		MOC–Floyd Valley (N = 32)	0.0%	15.6%	34.4%	50.0%	0.0%
		Mount Pleasant (N = 21)	4.8%	4.8%	57.1%	33.3%	0.0%

<i>Indicate the extent to which student achievement and data are used to make the following types of decisions in your school.</i>			Not at All (%)	To a Minimum Extent (%)	To a Moderate Extent (%)	To a Great Extent (%)	Response Missing (%)
Prompt	Round	Teacher Response (N)					
Identifying areas I need to strengthen my instruction.	1	Cedar Rapids (N = 36)	2.8%	5.6%	36.1%	44.4%	11.1%
		MOC–Floyd Valley (N = 49)	2.0%	2.0%	44.9%	49.0%	2.0%
		Mount Pleasant (N = 26)	0.0%	0.0%	46.2%	53.8%	0.0%
	2	Comparison (N = 212)	1.4%	13.7%	36.3%	43.9%	4.7%
		Cedar Rapids (N = 31)	0.0%	6.5%	67.7%	25.8%	0.0%
		MOC–Floyd Valley (N = 52)	0.0%	3.8%	36.5%	55.8%	3.8%
		Mount Pleasant (N = 23)	0.0%	0.0%	43.5%	52.2%	4.3%
	3	Comparison (N = 181)	0.0%	5.6%	47.2%	43.3%	3.9%
		Cedar Rapids (N = 14)	0.0%	7.1%	57.1%	35.7%	0.0%
		MOC–Floyd Valley (N = 32)	0.0%	3.1%	40.6%	53.1%	3.1%
		Mount Pleasant (N = 21)	0.0%	4.8%	19.0%	76.2%	0.0%
	Setting classroom improvement goals.	1	Cedar Rapids (N = 36)	2.8%	5.6%	50.0%	33.3%
MOC–Floyd Valley (N = 49)			0.0%	4.1%	49.0%	44.9%	2.0%
Mount Pleasant (N = 26)			0.0%	3.8%	57.7%	38.5%	0.0%
2		Comparison (N = 212)	0.5%	15.1%	37.7%	41.5%	5.2%
		Cedar Rapids (N = 31)	3.2%	9.7%	45.2%	41.9%	0.0%
		MOC–Floyd Valley (N = 52)	1.9%	3.8%	38.5%	51.9%	3.8%
		Mount Pleasant (N = 23)	0.0%	4.3%	47.8%	43.5%	4.3%
3		Comparison (N = 181)	0.6%	7.2%	46.4%	42.5%	3.3%
		Cedar Rapids (N = 14)	7.1%	0.0%	57.1%	35.7%	0.0%
		MOC–Floyd Valley (N = 32)	0.0%	6.3%	46.9%	46.9%	0.0%
		Mount Pleasant (N = 21)	0.0%	0.0%	42.9%	57.1%	0.0%

The ability to use student achievement data by school teachers is integral to their capacity to help identify gaps in student learning as well as how to use that information to improve their instruction. Teachers from both the comparison and pilot district sites were asked to describe the extent to which they use student achievement to work collaboratively with their teachers to improve a variety of school related issues. A description of the findings is discussed below.

- **Identify struggling students.** An overwhelming majority of teachers across the four groups (comparison, Cedar Rapids, MOC–Floyd Valley, and Mount Pleasant) indicated that they used student achievement data to identify individual students who need assistance to a great extent. This was consistent across all survey administrations. For example, 78.1 percent of teachers at MOC–Floyd Valley, 76.2 percent of Mount Pleasant teachers, and 85.7 percent of Cedar Rapids teachers from the third round agreed to a great extent. This pattern of responses was also present across 76.2 percent of comparison teachers.
- **Assign students to classes or groups.** The extent to which teachers used student achievement data to help assign students to classes or groups varied across survey rounds and districts. For example, between 17 and 29 percent of teachers from Cedar Rapids, MOC–Floyd Valley, and Mount Pleasant in round 2 stated they took part in this activity only minimally. In contrast, between 22 and 48 percent of teachers in the same round stated they used data to inform their assignment decisions a great extent. No more than 4 percent of teachers across the district sites and survey rounds stated that they did not engage in this activity. Teachers from the comparison district showed similar results, with 37 percent of respondents (in round 2) stating they used achievement data to assign students to groups to a great extent.
- **Identify and correct gaps in the curriculum.** Looking across all survey administrations, approximately 34 to 64 percent of teachers indicated that they use student achievement data to identify and correct gaps in their curriculum to a moderate extent. For example, in round 3, 46.4 percent of teachers in MOC–Floyd Valley, 52 percent of Mount Pleasant, and 53 percent of Cedar Rapid teachers identified with this statement. Only a small percentage of teachers—ranging from 4 percent to 23 percent across the three surveys—stated they only engaged in this activity to a minimum extent.
- **Identify areas of improvement for teacher instruction.** Across each of the two survey time points, teachers in the comparison group (80 percent in round 2 and 90 percent in round 3) indicated that they used student achievement data to improve their teaching instruction to a moderate or great extent. Similar results were found across the three pilot sites and survey rounds, with 80 to 98 percent of teachers indicating this pattern of response.
- **Set school improvement goals.** The use of student achievement data to set improvement goals was identified by both pilot site and comparison school administrators as an activity that they engaged in to a moderate or great extent. For instance, in round 3, 89 percent of comparison teachers, 93 percent of teachers from MOC–Floyd Valley and Cedar Rapids, and 100 percent of Mount Pleasant respondents selected one of these two response options. There was a small percentage of teachers (between about 4 and about 15 percent in survey round 2, for example) who stated that they used achievement data to set school achievement to a minimum extent.

Professional Development

Table F11. Overall Satisfaction With Professional Development

<i>Overall, how satisfied are you with the professional development that you currently receive?</i>		Very Dissatisfied (%)	Somewhat Dissatisfied (%)	Satisfied (%)	Very Satisfied (%)	Missing (%)
Round	Teacher Response (N)					
1	Cedar Rapids (N = 36)	5.6%	16.7%	61.1%	8.3%	8.3%
	MOC–Floyd Valley (N = 49)	2.0%	20.4%	57.1%	16.3%	4.1%
	Mount Pleasant (N = 26)	0.0%	7.7%	57.7%	34.6%	0.0%
2	Comparison (N = 212)	5.7%	28.3%	45.8%	12.7%	7.5%
	Cedar Rapids (N = 31)	6.5%	16.1%	71.0%	3.2%	3.2%
	MOC–Floyd Valley (N = 52)	1.9%	11.5%	59.6%	21.2%	5.8%
	Mount Pleasant (N = 23)	0.0%	8.7%	56.5%	30.4%	4.3%
3	Comparison (N = 181)	7.2%	26.0%	48.6%	10.5%	7.7%
	Cedar Rapids (N = 14)	0.0%	14.3%	71.4%	14.3%	0.0%
	MOC–Floyd Valley (N = 32)	0.0%	12.5%	81.3%	6.3%	0.0%
	Mount Pleasant (N = 21)	0.0%	9.5%	61.9%	28.6%	0.0%

In general, respondents from Cedar Rapids, MOC–Floyd Valley, and Mount Pleasant school districts reported being satisfied across all three survey rounds with the level of professional development they are currently receiving. For example, in round 3, 61.9 percent of Mount Pleasant, 71.4 percent of Cedar Rapids, and 81.3 percent of MOC–Floyd Valley teachers selected this response option. Roughly 8 percent to as many as 20 percent of this sample reported being somewhat dissatisfied with their current professional development during the same three time periods. In contrast, teachers from the comparison group had more than 50 percent of respondents from both the second and third surveys state they were satisfied with their professional development. Moreover, more than 25 percent of comparison teachers stated they were somewhat dissatisfied.

Collaboration

Table F12. Collaboration

<i>Indicate the degree to which you agree or disagree with the following statements about collaboration.</i>			Strongly Disagree (%)	Disagree (%)	Agree (%)	Strongly Agree (%)	Response Missing (%)
	Survey Round	Teacher Response (N)					
My school fosters collegiality among teachers.	1	Cedar Rapids (N = 36)	0.0%	16.7%	38.9%	36.1%	8.3%
		MOC–Floyd Valley (N = 49)	2.0%	8.2%	63.3%	22.4%	4.1%
		Mount Pleasant (N = 26)	0.0%	11.5%	61.5%	26.9%	0.0%
	2	Comparison (N = 212)	3.3%	10.4%	52.4%	26.9%	7.1%
		Cedar Rapids (N = 31)	3.2%	19.4%	51.6%	22.6%	3.2%
		MOC–Floyd Valley (N = 52)	0.0%	1.9%	69.2%	21.2%	7.7%
		Mount Pleasant (N = 23)	4.3%	17.4%	60.9%	13.0%	4.3%
	3	Comparison (N = 181)	1.7%	4.4%	59.7%	28.7%	5.5%
		Cedar Rapids (N = 14)	7.1%	21.4%	50.0%	21.4%	0.0%
		MOC–Floyd Valley (N = 32)	0.0%	0.0%	75.0%	25.0%	0.0%
		Mount Pleasant (N = 21)	0.0%	14.3%	52.4%	33.3%	0.0%
	My school works to build consensus among all members of the school community around a shared vision for change.	1	Cedar Rapids (N = 36)	0.0%	19.4%	52.8%	19.4%
MOC–Floyd Valley (N = 49)			4.1%	16.3%	57.1%	18.4%	4.1%
Mount Pleasant (N = 26)			0.0%	16.0%	60.0%	24.0%	0.0%
2		Comparison (N = 212)	2.8%	18.9%	50.9%	20.8%	6.6%
		Cedar Rapids (N = 31)	3.2%	25.8%	61.3%	6.5%	3.2%

<i>Indicate the degree to which you agree or disagree with the following statements about collaboration.</i>			Strongly Disagree (%)	Disagree (%)	Agree (%)	Strongly Agree (%)	Response Missing (%)
	Survey Round	Teacher Response (N)					
		MOC–Floyd Valley (N = 52)	1.9%	5.8%	61.5%	25.0%	5.8%
		Mount Pleasant (N = 23)	0.0%	17.4%	69.6%	8.7%	4.3%
	3	Comparison (N = 181)	2.2%	20.4%	51.9%	19.9%	5.5%
		Cedar Rapids (N = 14)	7.1%	28.6%	42.9%	21.4%	0.0%
		MOC–Floyd Valley (N = 32)	0.0%	12.5%	56.3%	31.3%	0.0%
		Mount Pleasant (N = 21)	0.0%	9.5%	61.9%	23.8%	4.8%
My school provides regularly scheduled time for team meetings and professional collaboration.	1	Cedar Rapids (N = 36)	2.8%	2.8%	63.9%	22.2%	8.3%
		MOC–Floyd Valley (N = 49)	0.0%	8.2%	51.0%	36.7%	4.1%
		Mount Pleasant (N = 26)	3.8%	7.7%	50.0%	38.5%	0.0%
	2	Comparison (N = 212)	7.1%	13.7%	43.4%	29.2%	6.6%
		Cedar Rapids (N = 31)	0.0%	19.4%	61.3%	16.1%	3.2%
		MOC–Floyd Valley (N = 52)	0.0%	11.5%	46.2%	36.5%	5.8%
		Mount Pleasant (N = 23)	0.0%	13.0%	60.9%	21.7%	4.3%
	3	Comparison (N = 181)	5.0%	11.0%	45.9%	32.6%	5.5%
		Cedar Rapids (N = 14)	0.0%	7.1%	57.1%	35.7%	0.0%
		MOC–Floyd Valley (N = 32)	0.0%	6.3%	56.3%	37.5%	0.0%
		Mount Pleasant (N = 21)	0.0%	28.6%	33.3%	38.1%	0.0%

<i>Indicate the degree to which you agree or disagree with the following statements about collaboration.</i>		Teacher Response (N)	Strongly Disagree (%)	Disagree (%)	Agree (%)	Strongly Agree (%)	Response Missing (%)
Survey Round							
Teachers and staff members at my school consistently work together (i.e., at least every two weeks) to solve school-related issues or problems.	1	Cedar Rapids (N = 36)	2.8%	8.3%	55.6%	25.0%	8.3%
		MOC–Floyd Valley (N = 49)	2.0%	20.4%	44.9%	26.5%	6.1%
		Mount Pleasant (N = 26)	3.8%	15.4%	57.7%	23.1%	0.0%
	2	Comparison (N = 212)	4.7%	22.6%	47.2%	18.9%	6.6%
		Cedar Rapids (N = 31)	9.7%	6.5%	74.2%	6.5%	3.2%
		MOC–Floyd Valley (N = 52)	1.9%	11.5%	59.6%	21.2%	5.8%
		Mount Pleasant (N = 23)	0.0%	26.1%	56.5%	8.7%	8.7%
	3	Comparison (N = 181)	5.5%	18.8%	45.3%	24.9%	5.5%
		Cedar Rapids (N = 14)	0.0%	28.6%	50.0%	21.4%	0.0%
		MOC–Floyd Valley (N = 32)	0.0%	15.6%	71.9%	12.5%	0.0%
		Mount Pleasant (N = 21)	0.0%	28.6%	47.6%	23.8%	0.0%

<i>Indicate the degree to which you agree or disagree with the following statements about collaboration.</i>			Strongly Disagree (%)	Disagree (%)	Agree (%)	Strongly Agree (%)	Response Missing (%)
	Survey Round	Teacher Response (N)					
Teachers at my school use findings from student achievement data to inform decision making.	1	Cedar Rapids (N = 36)	0.0%	2.8%	52.8%	36.1%	8.3%
		MOC–Floyd Valley (N = 49)	0.0%	0.0%	65.3%	30.6%	4.1%
		Mount Pleasant (N = 26)	0.0%	0.0%	76.9%	23.1%	0.0%
	2	Comparison (N = 212)	0.5%	3.3%	52.8%	36.8%	6.6%
		Cedar Rapids (N = 31)	0.0%	3.2%	71.0%	22.6%	3.2%
		MOC–Floyd Valley (N = 52)	0.0%	1.9%	55.8%	36.5%	5.8%
		Mount Pleasant (N = 23)	8.7%	4.3%	65.2%	17.4%	4.3%
	3	Comparison (N = 181)	1.1%	3.9%	48.1%	40.9%	6.1%
		Cedar Rapids (N = 14)	0.0%	0.0%	71.4%	28.6%	0.0%
		MOC–Floyd Valley (N = 32)	0.0%	0.0%	71.9%	28.1%	0.0%
		Mount Pleasant (N = 21)	4.8%	0.0%	66.7%	28.6%	0.0%
	My school provides adequate time to meet and collaborate with other teachers in my grade level and/or subject area.	1	Cedar Rapids (N = 36)	8.3%	13.9%	52.8%	16.7%
MOC–Floyd Valley (N = 49)			4.1%	30.6%	34.7%	26.5%	4.1%
Mount Pleasant (N = 26)			11.5%	38.5%	38.5%	11.5%	0.0%
2		Comparison (N = 212)	11.8%	30.7%	35.4%	15.1%	7.1%
		Cedar Rapids (N = 31)	12.9%	25.8%	51.6%	6.5%	3.2%
		MOC–Floyd Valley (N = 52)	1.9%	28.8%	44.2%	17.3%	7.7%
		Mount Pleasant (N = 23)	4.3%	43.5%	34.8%	13.0%	4.3%
3	Comparison (N = 181)	8.8%	31.5%	39.2%	14.9%	5.5%	

<i>Indicate the degree to which you agree or disagree with the following statements about collaboration.</i>			Strongly Disagree (%)	Disagree (%)	Agree (%)	Strongly Agree (%)	Response Missing (%)
	Survey Round	Teacher Response (N)					
		Cedar Rapids (N = 14)	7.1%	21.4%	57.1%	14.3%	0.0%
		MOC–Floyd Valley (N = 32)	6.3%	15.6%	59.4%	18.8%	0.0%
		Mount Pleasant (N = 21)	4.8%	38.1%	38.1%	19.0%	0.0%

To assess the forms of collaboration at their schools, all teachers were asked the extent to which they agreed or disagreed with the following statements. Fostering collaboration among staff was a primary goal of the three pilot projects, so responses to these survey questions provide insight about the extent to which teachers at the pilot schools and the comparison schools perceived levels of staff collaboration on a variety of indicators.

- Collegiality among colleagues.** Respondents were asked whether they agreed or disagreed with a statement about their schools fostering collegiality among their teacher colleagues. Overall, most respondents believed their schools were supportive in creating this type of working environment. For example, across each of the three survey administration, more than three fourths of the teachers from Cedar Rapids (with the exception of the first round), MOC–Floyd Valley, and Mount Pleasant agreed with this statement. A similar percentage of comparison group teachers—79 to 80 percent—in survey rounds 2 and 3 stated they either agreed or strongly agreed as well. Moreover, approximately a quarter of all respondents from across all four stakeholder groups and survey rounds indicated that they strongly agreed with the statement. Roughly 17 to 21 percent of teachers from Cedar Rapids and 12 to 17 percent of teachers from Mount Pleasant disagreed with notion that that their schools fostered collegiality among its teachers.
- Building consensus around a shared vision for change.** The need for schools to have and build consensus around a shared vision is important in that it allows for all stakeholders (e.g., teachers, principal, students, parents) to understand and know what direction the school is heading in. When asked the extent to which they agreed or disagreed with their school efforts to build consensus among members of the school around a shared vision, results reveal that across each survey round between 42 percent and 69 percent of all teachers surveyed chose –agree” for this statement. For example, in round 2, 51 percent of comparison teachers, about 61 percent of Cedar Rapids and MOC–Floyd Valley teachers, and 70 percent of Mount Pleasant teachers chose –agree.” It should be noted, however, that a small percentage of teachers disagreed with the statement. For instance in round 3, 20.4 percent of comparison teachers and 28. 6 percent of Cedar Rapids teachers disagreed with the statement.

- **Regularly scheduled time for team meetings and professional collaborations.** When asked whether their schools provided regularly scheduled meeting for faculty collaboration, between 33 percent and 64 percent of teachers across the three pilot sites agreed with the statement. For example, during the first survey, 63.9 percent of respondents from Cedar Rapids, 51 percent from MOC–Floyd Valley, and 50 percent of Mount Pleasant chose ~~–agree.~~” Likewise, more than 40 percent of comparison teachers responded with ~~–agree.~~”
- **Consistent collaboration with teachers to solve school-related problems.** Across all survey rounds, roughly 19 percent of respondents from the comparison group and as many as 29 percent of pilot district sites stated that they disagreed with the statement that asked whether they met consistently (i.e., every two weeks or less) with their colleagues to collaborate and solve school-related problems. The vast majority of teachers across all four stakeholder groups indicated that their schools did engage in such collaborative conversations. For example, during the second survey, 74.2 percent of teachers in Cedar Rapids, 59.6 percent of MOC–Floyd Valley, 56.5 percent of Mount Pleasant, and 47.2 percent of comparison teachers stated they agreed with the above statement.
- **Use of student achievement data to inform decision making.** A high percentage of teachers at pilot sites, ranging from 83 percent to as high as 100 percent across the three survey rounds indicated that their colleagues used findings from their student achievement data to inform their decision making. For instance, 66 percent of teachers in Mount Pleasant and 71 percent of teachers in MOC–Floyd Valley in round 3 and ~~–agreed~~” with this statement. Nearly one third of teachers from the same district and survey round indicated ~~–strong agreement.~~” Similarly, between 52 to 48 percent of comparison teachers in the second and third survey rounds, respectively stated they agreed as well.
- **Adequate time to meet and collaborate with teachers in the same grade or subject area.** Results from the surveys show great variance among teacher respondents when asked whether their schools provided them with adequate time to meet and collaborate with their colleagues in the grade level or subject area. For example, there was almost an even split in round 1 between the percentages of teachers who agreed and disagreed with the statement in MOC–Floyd Valley (30.6 percent and 34.7 percent) and Mount Pleasant (38.5 percent in both cases). This trend was replicated for teachers in the comparison group as well in the last two survey rounds.

Appendix G

Case Study of the Mount Pleasant Community School District Pay-for-Performance Pilot Program

Mount Pleasant School District Background

Mount Pleasant is the 36th largest school district in Iowa. There are approximately 2,200 students enrolled in the district school system with about 41 percent of the population eligible for free or reduced-price lunch, 12 percent of the students identified as special education, and 4 percent identified as English language learners. According to interview data, the district performs slightly lower than the rest of Iowa on the state assessment with the special education subpopulation identified as an area of need. Further, student norms typically score in the 70th and 80th percentiles on the second grade state assessment but from the fourth through eleventh grade state assessments, their scores decrease, on average, to the 48th percentile.

With this information, the Mount Pleasant school board has pushed the district to focus on increasing student achievement across all populations and in all grade levels. In 2007, in an effort to respond to this call from the school board, the district began to focus on assessment and curriculum changes to address the needs of students. This coincided with the state's announcement of competitive funds to implement an alternative compensation program in districts throughout the state. Fueled by the school board interest in raising student achievement, a new focus on assessment and curriculum and encouraged by the rise in national interest in alternative compensation, particularly pay for performance, Mount Pleasant decided to apply for and received the funds in 2008. As one interviewee shared, "We knew that the state was doing pay for performance pilots and...the [school] board was wanting to do something more with student achievement...so my motivation was assessment and student achievement."

Data-Collection Methods

To address the three evaluation questions, Learning Point Associates identified 10 potential respondents who were principals, teachers, and the superintendent who had various amounts of experience and involvement in the planning and implementation of the Mount Pleasant pay-for-performance program. All were contacted and asked to participate in the hour-long interview. Between May 11 and June 10, 2009, the evaluation team interviewed eight respondents at Mount Pleasant School District—two principals, four teachers, and two district officials—through both face-to-face and over-the-phone interviews. All interviews were recorded, transcribed, and analyzed looking for themes pertaining to programmatic changes, modifications from the theory of action, discussion of accomplishments, challenges, lessons learned, and feasibility of scaled implementation.

Program Development

To begin preparation for the state application for funding, the Mt. Pleasant school district established the Pay-for-Performance Planning Committee to lead the development of the program. In accordance with the legislative statute, the district needed teacher and union support

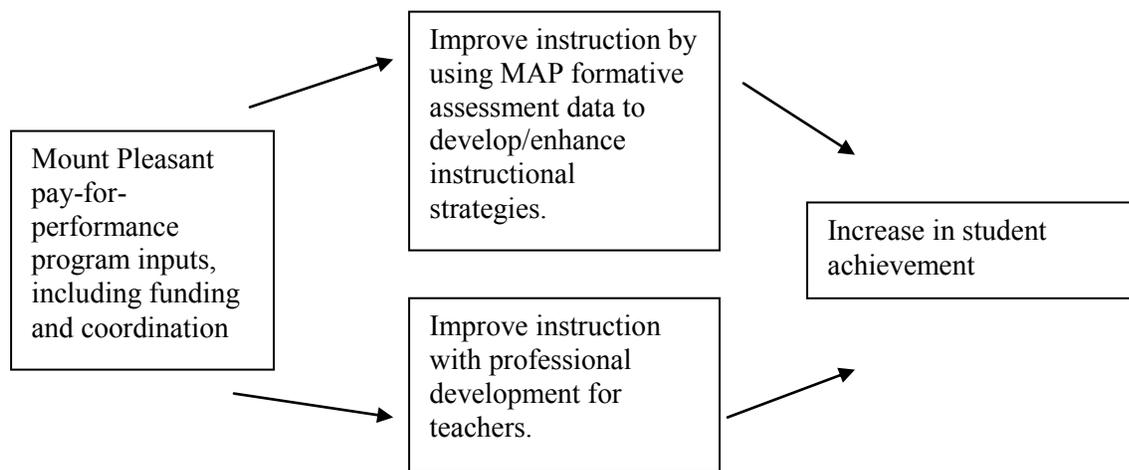
in order to receive funding. To establish a relationship between the central administration and the teachers, the district enlisted teachers and principals who were also union representatives into the Planning Committee. The teacher, principal, and union presence on the committee ensured that their voices and viewpoints would be heard while developing the program. In addition, when program implementation first began, those teachers on the committee met with their colleagues to discuss the program and garner their support for the program. The union assured the committee that the teachers would be supportive of such a program and the district applied for funds. As one interviewee said:

We have four teachers and four administrators. Because we had to get union approval...we were going to apply for the grant as a group then teachers had to take back [to] their union, and say are you guys willing to sign off, and they said yes.

To further develop their knowledge of alternative compensation, the committee traveled across the country to attend conferences and visit schools already implementing a pay-for-performance program in an effort to understand the complexities of implementing an alternative compensation program as well as to learn from past experiences. The committee traveled to a conference hosted by the National Center on Performance Incentives, visited Poway School District in California, and had discussions with participants in Denver ProComp’s system. In addition, the committee met several times to discuss readings, mainly how to design a pay-for-performance program. After traveling and reading the research, the committee developed its theory of action for the program.

Program Overview

Theory of Action for the Mount Pleasant Pilot Program



Fair and Valid Assessment

The district invested a considerable amount of time researching and discussing various assessments of student achievement and teacher effectiveness: value-added formulas, interim

assessments, and end-of-course assessments. Many school districts across the country use Measures of Academic Performance (MAP) as established by the Northwest Evaluation Association (NWEA), coupled with professional development on how to use the assessment. MAP is a computer-based adaptive test that offers teachers information on individual student learning. Further, NWEA works with school districts to ensure that MAP aligns with the state curriculum, thereby testing students on information that is in concert with the state priorities. The planning committee visited one of the districts using MAP, Poway School District, and saw firsthand how the district was using the information that MAP computes to inform teacher instruction and student learning. Once the district saw the benefits of the program and recognized that it aligned with their desire to use a formative and summative assessment to improve student achievement while aligning the state curriculum with an assessment, and after much discussion, the district decided that developing a program built around MAP would result in growth in student achievement. The district's program thus hinges on the use of and information gleaned from MAP. One teacher shared the following about their decision for using the MAP assessment:

[A fair assessment] is a make or break thing... We believe all children can learn no matter what. So we needed a model that would illustrate the growth that the teacher brought. Not only whether they are proficient... Because you can have children that come to you and grow a year and a half, but they're still not proficient. But you can't take growth away.

Stakeholder Support

Once the district decided that it would be using the MAP assessment, support from teachers was a necessary component for the district to receive the funds. Mount Pleasant allowed teachers to opt into the program and emphasized that the program would be focused on the use of MAP as opposed to highlighting the pay-for-performance piece of the program. The district took this approach because they believed that focusing on the assessment piece would help to garner more support for the program. In addition, the district understood that continuation of the funding was not guaranteed and that if the performance piece was the main incentive, it might be difficult to enlist teacher support in the future if there were no performance award.

To build further support for the program, the committee established regular guidepost meetings. These meetings were an open forum at which program participants, parents, and other stakeholders could ask questions and receive information about the program. The committee recognized that busy schedules meant that there was no one time that would work for all participants and offered the guidepost meetings at two times during the day, one in the morning and another after school. As one interviewee stated:

we would have these what we called guidepost meetings.... Anybody that had any questions or concerns could come to those guidepost meetings because we wanted to be as transparent as we possibly could. We didn't want to keep anything hidden... [we] [d]idn't get a lot of people that attended... [T]hose that did could ask questions, and you can dispel a lot of rumors you know, that they got out of the buildings, and accomplish, I think, what we wanted.

The district chose to implement the program in Lincoln Elementary School and Mount Pleasant Middle School first. All teachers at Lincoln Elementary School as well as Language arts and mathematics teachers at the Middle School were eligible. Altogether 26 teachers agreed to participate in the program. These two schools were chosen because there was both teacher and union representation on the planning committee and it was believed that these two schools would be the most supportive of the program from the beginning. This also was shared:

Well, we stuck with only making the offer to the one elementary just because the assessment expert said you really only want to do one building at a time.... We kept hearing from people start small. Be successful.... And so that's why we only started with one elementary. And then that's why at the middle school we only said anybody that was interested.

Program Operations

As previously mentioned, the program depends on the information gleaned from the MAP assessments. At the beginning of the school year, students are tested and given a baseline score. The MAP assessment asks students 52 questions, and each question is based on the response to the previous question, thereby customizing each student's series of test questions to her or his ability. The test informs teachers on the sets of skills and knowledge the student needs to work on as well as the benchmarks and the standards to which each skill set is related. Teachers receive data reports on each of their students and within those reports are learning goals, as developed by the MAP assessment. A learning goal is the score that the student should achieve by the end of the school year. For example, if a student receives a score of 200 at the beginning of the year, the student's learning goal could be 220 by the end of the school year. After each student receives his or her score, the teacher and student meet to discuss the learning goal as well as to develop a plan for reaching the learning goal by the end of the year. The \$1,000 award that teachers are eligible for through the pay-for-performance component of the program depends on the students meeting their learning goals.

Performance awards are distributed if 60 percent of the students in a classroom reach their learning goals by the end of the year. Students are tested three times during the year, fall, winter, and spring, to check whether they are on track to meet their learning goal. If a student has already reached the learning goal by the winter assessment, MAP can generate a new goal for the student, but the teacher is not held accountable for the student meeting this new learning goal. In addition, if a student misses more than 17 days of school or enters the school year late, that student is not included in the 60 percent calculation.

One elementary school teacher explained why the district decided on a target of 60 percent in order to be eligible: "The typical would mean half do, half don't [reach growth targets].... We wanted to ante up typical just a little bit.... So that's kind of how we came at the 60. It was better than the average, but we didn't want to make it impossible, either." The 60 percent target was also informed by meetings with other states and districts implementing a performance-based compensation program. Two examples are Minnesota's Quality Compensation Program (QComp) and Plano, Texas. Reflection at the close of the program led some to feel that the target might have been set a little too low because only two teachers did not receive an award. One

respondent stated that because it was the first year, it was better to take it slow and focus more on the use of the MAP data: “I think one of the conversations we’ll have to have is...if we would do it again, set it higher. Because we had one teacher make 93 of her targets. And even the lowest was 55. But there were only two below the 60. Everybody else was 70s or 80s.”

Professional Development

As outlined in the theory of action, understanding the MAP data and being able to effectively use that information to address the needs of every student is a crucial piece of Mount Pleasant’s pay-for-performance program. In an effort to capitalize on the use of this information, the district introduced a professional development system called MAP 101 for all teachers participating in the pay-for-performance program. A majority of MAP 101 curriculum is the same curriculum that was used in Poway School District. In addition to using the professional development from Poway, Mount Pleasant brought in an external facilitator from NWEA to assist in facilitating MAP 101. Overall, MAP 101 was designed to provide teachers with information about the assessment, strategies for analyzing the assessment data, approaches for sharing the information with other stakeholders, and other potential uses of the information. One teacher shared this:

MAP 101 was more of the mechanics year. Learning how to use it [data]. Understanding what it means...what that tells you about your class. Understanding how to...set targets for children.

During the school year, teachers met for 16 hours of MAP 101 professional development in addition to their regular professional development activities. Teachers who participated in the program were compensated \$300 for attending the additional professional development sessions. Although the professional development during the first year was designed to introduce teachers to MAP, the district has decided that additional professional development in subsequent years will use the information collected from the assessment to inform professional development activities, particularly for differentiated instruction strategies:

But the true differentiation discussion of what is differentiation, how do I assess that. What are different ways to do that. That has to wait till MAP 102.

After each professional development session, participants had the opportunity to evaluate the session and provide feedback. This feedback was solicited through surveys as well as through direct comments the participants made. Because MAP 101 focused on issues that were not necessarily related to teaching strategies, it was unclear how the professional development was applied in the classroom.

Outcomes

As demonstrated in the theory of action, the overall program goal is to increase student achievement. All interviewees cited this as the main goal of the program, demonstrating that the district clearly and consistently communicated this as the program’s goal. In addition to increasing student achievement, the district hoped for an increase in teacher accountability on student achievement. The student learning goal is the measure of teacher accountability used by

the district because the assessment sets a target of annual student growth. It is this goal that is used when determining an award payout and thereby putting a focus on teacher actions in the classroom.

As previously mentioned, the MAP assessment was the main focus of the program, not the pay-for-performance piece, and the MAP formative assessments were intended to influence teacher practice. This was a change in the culture of the school because there was an accountability component that was not previously there. As one teacher said,

There are all kinds of things that I do that...really encourage me...I'm starting to work little bit harder because I am going to be held accountable.

There was also a desire to strengthen relationships among the district, teachers, principals, and the union. The establishment of the pay-for-performance committee was a lever in bringing together these different stakeholders.

I have people reflecting in ways I've never seen. People talking to each other...using primary MAP as an additional data point. I mean that wasn't our goal.

Successes and Strengths

During the interviews, it was clear that the participants could list many successes of the program. All interviewees agreed that the amount, depth, and quality of information they received on each student was invaluable to their success in teaching each individual student. The MAP allowed teachers to track the various needs of their students and then base instruction on those needs. Teachers were excited to see their student scores and reflect on the information that was provided by the assessment. One teacher noted that

Just before I came here [interview], I was talking to a fourth grade teacher that had given her mathematics test results and it was just so exciting. She knows she made an impact.

In addition, the frequency and real-time data reports allowed teachers to adjust their assignments to ensure student understanding of lessons. According to one teacher:

We were very impressed with the results, but probably more I was very impressed with the information that I gained. I knew more about my students at the end of last year than I have in the 19 years I had taught.

This renewed focus on instruction has allowed teachers to analyze individual student strengths and weaknesses and differentiate instruction to focus on those skills.

Further, the district appreciates the information provided by MAP and the projected student growth that will show on the state assessment. As a result, Mount Pleasant district leaders decided to extend the assessment to other classes and schools in the district. This demonstrates the district's desire to continue to maintain the use of MAP. In addition to using the assessment in more classes, Mount Pleasant has been approached by other schools within the state to share

information, best practices, and lessons learned after they learned the benefits Mount Pleasant got from the program.

Another success was creation of a computer laboratory at Lincoln Elementary School. Because MAP runs on a computer and Lincoln Elementary did not have a laboratory in the school before implementing the program, the district needed to build one for the students to take the assessment. In addition to using the computer laboratory for MAP testing, students now have the opportunity to use technology for other purposes and build their technological capabilities during the school day.

The initial groundwork conducted by the planning committee; traveling to other districts, reading about alternative compensation programs, and attending conferences is a strength of the program. During the initial planning phase, the group noted the importance of clear communication and transparency to establish stakeholder buy-in and support. The creation of regular guidepost meetings facilitated the dissemination of information and provided a place to voice concerns. By taking these steps, the district was able to establish support for the program from the beginning. As one teacher noted:

[In] my opinion teachers were concerned about change but we kept communicating through our guidepost meetings....I think the anxiousness about things kind of alleviated. I think we[‘ve] done a great job of communicating to staff members.

Challenges and Weaknesses

A challenge mentioned by three interviewees was the access to a wealth of information on students, standards, and benchmarks that the MAP assessment provides. Although the access to so much information on each student was both empowering and appreciated, it was noted that at some points the abundance of information was overwhelming. Building on the access to extensive data, how to handle that data to address the different needs of their students was a challenge that the interviewees noted. When the program began, the committee had not planned to use the professional development to inform teachers on best practices for differentiated instruction but rather to explore strategies to use the MAP data. As a result, teachers who wanted to differentiate their instruction sometimes employed strategies that were not considered research-based best practices. To address this issue, next year’s professional development opportunities provided through MAP will include a focus on differentiated instruction. Follow-up conversations with the district curriculum director also noted that in the future, MAP curriculum will use the World Wide Web with mapping software that will align benchmarks for each unit with the NWEA’s DesCartes, the learning continuum resource that is aligned to Iowa’s state curriculum, and test vocabulary.

Further, it became apparent that there were not enough resources available to teachers to push students who were excelling above grade level. Several interviewees mentioned that they wished they had more resources available to allow them to work with high-achieving students in order to further facilitate their growth above their current grade level. One interviewee stated the following:

[T]he Lincoln building wanted to do differentiation and go in some directions that [weren't] best practice.... Which then led to the group saying, "Well, okay. We probably do need a MAP 102 just focused on differentiation for the top kids."

During the implementation of the program, another unexpected issue arose in relation to the logistical coordination of the program: the lack of a computer laboratory at Lincoln Elementary School previously mentioned. The district constructed the laboratory out of a large portion of the teachers' lounge. Because it was not a room that was designed to house several computers, the room became extremely hot when all the computers were in use. There was some concern that this might affect student performance on the assessment.

In addition to the logistical complication, some initial teacher reactions to the implementation of the MAP assessment were tentative. According to a couple interviews, some of the veteran teachers were leery of participating in the program because it had implications of changing their teaching practice. There was some anxiety that the program would call attention to teaching practices that had been employed for a long time and that were not as effective with students as previously thought. One participant shared this:

I think the teaching profession as a whole is scared of the whole pay for performance tie as far as if I don't produce, then that it's going to mean that I'm not being effective.... I think one of the biggest issues that they're going to have to combat is culture.... the veteran teachers that are already established. I think it can be intimidating to them.

As previously stated, only Lincoln Elementary School and Mount Pleasant Middle School mathematics and language arts teachers were eligible to participate in the program because the MAP assessment is available only in those subjects. When probed to see whether teachers in untested subjects were dissatisfied with being unable to participate, one teacher said this:

[T]hey know this is a one-shot deal. However, if it became every year [I] could earn \$1,000 but the music teacher couldn't. If it was every year, yes, it would be a problem.

If the additional compensation had been available for multiple years, then the district could foresee issues with teachers in untested subjects. The district continues to search for valid and fair assessments for all subjects in the district in an effort to extend a pay-for-performance program to all teachers.

As mentioned earlier, the program was not pitched as a pay-for-performance program as much as it was described as an opportunity to participate in a new assessment trial. Teachers were aware that there was a pay-for-performance component, but the professional development sessions and guidepost meetings focused more on the MAP than on the pay-for-performance piece. As a result, it is difficult to assess the influence of the pay component in increasing student achievement. It was shared that once the district decided to participate in the program, all research and information indicate that in order to garner the necessary stakeholder buy-in, one of the most crucial levers is to have a fair assessment. Once the district decided on MAP, the conversation moved to MAP and how to most utilize the assessment at the classroom level. Most interviewees agree that if the district never applied for the funds, then they never would have

discovered and utilized the MAP assessment. It is difficult to assess whether the pay-for-performance component of the program was the effective lever that influenced student achievement.

Scaled Implementation

According to the interviewees, a scaled implementation of the program is entirely feasible. Mount Pleasant is already seeing the program expand to other districts in the state. The district has agreed to host other districts throughout the state to share information learned from MAP 101. These lessons include establishing an information dissemination vehicle similar to the guidepost meetings; having teacher, union, and principal representation on the planning committee; and starting smaller and then expanding. One district interviewee shared this:

I've offered to all the districts in the area to meet once a month to just safeguard things and to protect them.... We went to meetings and talked to them about that and other projects that would be of mutual benefit to them.... And they came to realize that we had stumbled on something that would be quite valuable to them. So we have multiple districts that are joining our consortium of 130 districts and then some have more money than others and are starting the MAP. So we're influencing our peers.

Pleased with the data and processes in this pilot year and in an effort to extend the assessment to more teachers, the district will include a science MAP assessment, incorporate another elementary school, include all kindergarten through grade 12 special education students and require all mathematics and language arts teachers to participate during the 2009–10 school year. One interviewee mentioned that finding an assessment for all subjects and grades was a priority for the district, although it has been difficult to find valid and reliable assessments. The district understands that there are no funds available from the Iowa Department of Education for the 2009–10 school year, but the district believes that the information is valuable for improving student achievement and will budget funds accordingly in order to maintain MAP use in the district. One interviewee made this comment:

[W]e know eventually we're going to have to do it [pay for the MAP], so that's part of my responsibility.... If we're going to do something like this I have to ensure people that the resources are going to be there to do it because the worst thing that could happen is if we get everybody excited, and tomorrow we pull the plug."

Appendix H

Case Study of the MOC–Floyd Valley Pay-for-Performance and Career-Ladder Programs

MOC–Floyd Valley District Overview

The MOC–Floyd Valley Community School District (<http://www.MOC-fv.k12.ia.us/district/index.php>) lies in the northwest corner of Iowa, serves more than 1,400 K–12 students, and employs approximately 150 faculty and staff members. This rural district is composed of two elementary, one middle, and one high school. According to the district administration, MOC–Floyd Valley has a relatively small subpopulation of ethnic minority and academically nonmainstream students. For example, one principal estimates that 13.5 percent of students enrolled in the district are special-needs students and 7 percent are Hispanic or English language learners (ELL). The district administration notes that Hispanic students are a relatively new population to the MOC–Floyd Valley school district and present the district with new challenges.

From the perspective of one administrator, the MOC–Floyd Valley school district is composed mostly of teachers who are in the ethnic majority and female, and more than 50 percent of all teachers hold an advanced degree (e.g., master’s). The administration notes that teachers hired within the district often come from and attend colleges and universities within the state and the majority are local residents or live in the northwest corridor of Iowa. All four administrators name few issues with teacher attrition. According to one school principal, most teachers in his school stay until retirement; the most recent departure left after spending 34 years in the profession. He estimates a 5 percent turnover, or roughly 1 or 2 teachers each year. According to district personnel, the mean age of a MOC–Floyd Valley teacher is approximately 47; most teachers have between 10 years and 30 years of experience. In sum, the district can be described as having a mostly veteran teaching force.

When it comes to student achievement, the district excels in areas of reading and mathematics. According to the 2006–07 adequate yearly progress (AYP) report (<http://www.MOC-fv.k12.ia.us/district/ayp/aypdistrict.pdf>), 93.6 percent and 94.8 percent of all students in Grades 3–5 met the AYP goal in mathematics and reading, respectively. Likewise, 92.01 percent and 86.8 percent of students in Grades 6–8 met AYP in those subject areas. Notwithstanding, a lower percentage of students passed their 11th-grade mathematics and reading AYP goals (81.7 and 76.4, respectively). According to one administrator, the district ranks in the top 2 percent of the state when it comes to student achievement.

Data-Collection Methods

To address the three evaluation questions, Learning Point Associates identified 10 potential respondents—principals, teachers, and the superintendent—who had various levels of experience and involvement in the planning and implementation of the MOC–Floyd Valley pay-for-performance program. All were contacted and asked to participate in an hour-long interview. Between May 4 and 8, 2009, the evaluation team interviewed seven respondents—three

principals, three teachers, and a district administrator—at MOC–Floyd Valley Community School District through both face-to-face and over-the-phone interviews. All interviews were recorded, transcribed, and analyzed looking for themes pertaining to programmatic changes, modifications from the theory of action, discussion of accomplishments, challenges, lessons learned, and feasibility of scaled implementation.

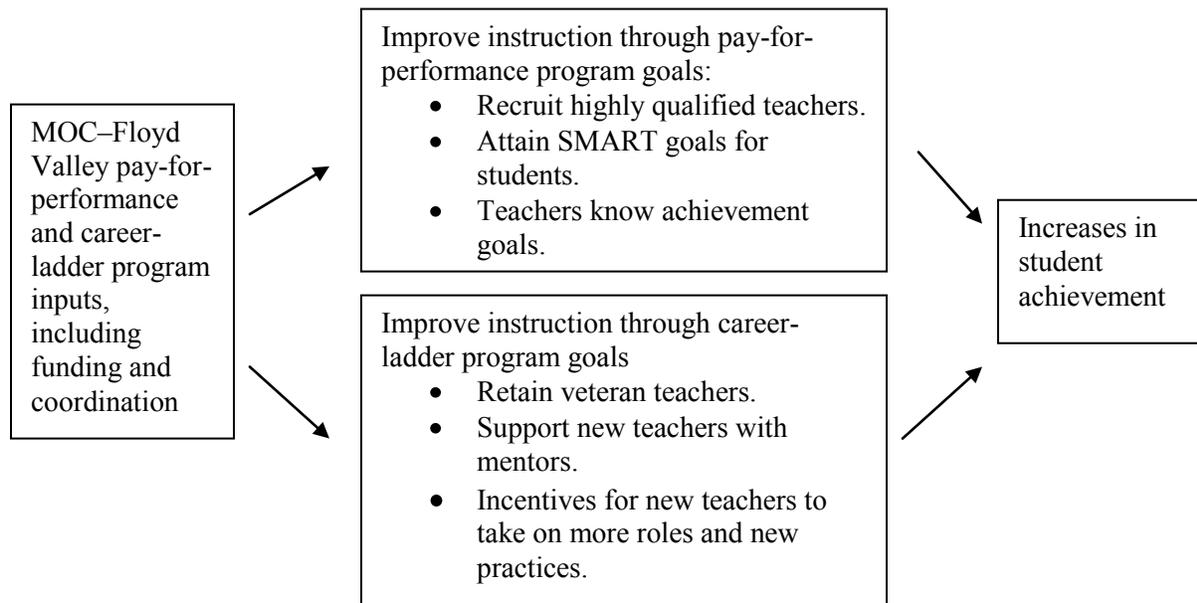
Overview of the MOC–Floyd Valley Pay-for-Performance and Career-Ladder Program

Using funds from the state, the district implemented a hybrid pay-for-performance and career-ladder program during the 2008–09 school year. MOC–Floyd Valley submitted a proposal in response to the Iowa Department of Education (IDOE) request for proposal (Iowa Department of Education, 2007) to develop and implement a pay-for-performance program that would afford the district the opportunity to systematically sustain what they believed to be important to improving teacher practices and student achievement through reflection, change, and research. The MOC–Floyd Valley’s pay-for-performance program completed its first full year of scaled implementation in 2009. To assess the implementation process, the district administration and participating teachers were interviewed in spring 2009 for the purpose of assessing the strengths or weaknesses of the program, the feasibility of scaled implementation to other districts in the state, and their plans for sustaining the program once funding ends. A description of the data-collection methods and characteristics of the sample appears at the end of this case study.

Theory of Action

This case study evaluates the MOC–Floyd Valley School District’s theory of action (Figure H1) developed by the evaluation team and reviewed by the district administration. A theory of action is a problem-solving approach taken to address obstacles and achieve better results (Patton, 1997; Weiss, 1998) and it is designed to illustrate how the district plans to meet the goals and outcomes of the pay-for-performance program. As depicted in Figure H1, the district’s pay-for-performance pilot program aims to improve teacher instruction and ultimately student achievement through the implementation of key pay-for-performance and career-ladder components. Using elements of a pay-for-performance approach, the district hopes to improve instruction by recruiting highly qualified teachers into the program, ensuring that teachers know what the district- or school-level achievement goals are, and employing the use of specific, measurable, attainable, realistic, and timely (SMART) goals. Likewise, under the a career-ladder design, the district expects to retain veteran teachers, support new teachers with mentors, and provide incentives for new teachers to take on more roles and exhibit better teaching practices.

Figure H1. Theory of Action for the MOC–Floyd Valley Pilot Program



The purpose of this case study is to describe the components of the district’s pilot program, the extent to which—from the perspective of program participants—the program has met its goal of improving student achievement and highlight expected and unexpected challenges, successes, outcomes, and lessons learned.

Profile of the MOC–Floyd Valley Pay-for Performance Program

The MOC–Floyd Valley pay-for-performance program operates under two congruent components—the Tiered Lead Teacher Program and the SMART goals and corresponding assessment examinations—which are designed to build upon each other in an effort to ultimately improve student achievement. A review of these two components follows.

The Tiered Leader Teacher Program

In order to solicit active participation from teachers into the larger pay-for-performance pilot, the MOC–Floyd Valley school district initiated a two-tiered program called the Tiered Lead Teacher Program. This new program was voluntary for mathematics, science, reading, and social studies content-area teachers. To participate, teachers had to apply by October 30, 2007, by submitting a letter of application and personal statement to the superintendent. In the first, or planning, year (2007–08), approximately 15 teachers representing each of the schools and all grade levels were admitted into the program. This first cohort of teachers was referred to as mentor teachers and, as part of their responsibilities in the first year, teachers were asked to develop performance-level descriptors (PLDs) and were paid \$2,000 for their participation. PLDs are described by one teacher as “descriptors...[that] describe at each level what...the students should be able to accomplish or achieve,” while also helping to “guide teachers in the assessment process...[that] will allow you to then guide students to those levels of achievement.” PLDs were created for

each building and are deemed by one administrator to be ~~an~~ important tool for assessing student achievement.”

In the second year (2008–09), the tiered leader teacher program was scaled up to recruit a second cohort of approximately 15 new teachers to become the new tier of mentor teachers.

Approximately eight teachers from the original 2007 cohort of teachers reapplied in the second year. They were promoted to the position of second-tier veteran teachers. In all, roughly 30 teachers have participated in both levels of the tiered leader teacher program to date. For their compensation in 2008–09, all teachers were paid a stipend of \$ 2,500 each to work 10 days during the summer to continue to develop PLDs and formative assessments. The use of these summer collaborations, or ~~extended learning opportunities,~~” as the district refers to them, allowed for, from the perspective one administrator, ~~the quality of the finished products [to be] excellent~~ and would not [have otherwise] be[en] replicated if done during the contract days allotted via the master contract.”

SMART Goals and the Use of Formative Assessments

To assess individual student learning as part of the pay-for-performance program, the district implemented SMART goals. SMART goals are measured through the collection of student achievement data from formative assessments (that is, pre- and posttests, etc.) that are predetermined by the individual teacher and school administrator. The implementation of the SMART goals creates consistency across the K–12 continuum for assessing student growth and, for this reason, was considered an important endeavor for the district. According to one district administrator,

We lacked [a] consistent format for evaluation...whether the goal was met or [if] it was more subjective. The professional growth targets [were] not tied so directly...not as specific, not as timely...and the [SMART goals] brought the same format for everybody...very clearly defined what it is you will do, when you will do it, [and] how you will do it.

To clarify, all teachers were required to meet with the building principal before they wrote their SMART goal(s) to ~~pick an area of student achievement...that could [be] improved upon~~” as well as the type of data they planned to collect and identify any resources needed. The majority of teachers developed only one SMART goal for the year although they were not limited to that number. To ease and formalize this process, all teachers were given a template developed by the veteran teachers in the tiered leader teacher program to use when writing their goals. One of the few directives given to teachers and administrators was that the goals had to be tied to student achievement, and thus, goals that focused on improving classroom management, for example, were deemed inappropriate. Teachers and principals worked together to determine a set percentage from which students in their class must show improvement or proficiency in order to say that the SMART goal had been met. The predetermined percentage was also chosen or influenced by building goals and subject area. According to one teacher, the SMART goals were ~~something that you knew would stretch you and your students. So there wasn’t a set percent[age] buildingwise...there’s not a minimum number because they all change depending on the concept that you’re working on.~~” Moreover, from the perspective of one administrator, by

using SMART goals the district can ~~tie~~ incentives, stipends, or wages to work that is done or not, in the classroom if it is tied to teaching strategies...as opposed to...cohort standardized test results.”

Timeline for SMART Goal Implementation. The timeline for developing and completing the SMART goal depended on the teacher and the unit of instruction that was to be assessed. According to interviewees, all teachers were required to meet with their principal in September to develop their goals, set benchmarks for achievement, and discuss methods for collecting data. A second debriefing meeting was scheduled by the teacher in April to present evidence of achievement to their building administrators. The minimum amount of time a teacher had to collect data was three weeks at the high school level and could be several months at the elementary or middle school level.

Measuring SMART Goals Through the Use of Formative Assessments. The use of SMART goals and formative assessments is to help determine the level of student learning or, more specifically, his or her ability to meet the essential learning established by the school or district. The formative assessments used varied by building, grade level, and teacher. The teachers used SMART Boards, interactive whiteboard, journals, logs, and small quizzes. Several teachers and administrators interviewed noted that data collected from these various formative assessments allowed for teachers and students to have immediate feedback on student progress. This encourages teachers to reassess and correct their instruction shortly after testing rather than at the end of the year. For example, if a student does not perform well on a formative assessment test, the student will be required to come in for extra instruction and support. This also creates more opportunities for communication with parents during the learning process.

Other Components of the Pay-for-Performance Pilot Program

In addition to the Tiered Leader Teacher program, SMART goals, and use of formative assessments, the larger pay-for-performance pilot program also includes several smaller, yet equally important, elements such as peer-led professional development, use of outside consultants, the development of PLDs and Essential Learnings (i.e., course objectives), and financial incentives—all aimed at improving student achievement outcomes. A summary of these components follows.

Peer-Led Professional Development and Use of Consultants

To address the professional development needs of its staff, the MOC–Floyd Valley pay-for-performance program employed a ~~“train the trainer”~~ model or peer-led teacher professional development workshops. The district also hired two consultants to fly in for three or four days during summer 2008 to advise and train the first cohort of 15 mentor teachers from the tiered lead teacher program. The training included advice on how to implement reading strategies with their peers. For the 2008–09 academic year, the consultants returned to work the teacher cohorts to refine their PLDs and formative assessments.

All teachers in the district were afforded ~~“early outs”~~ or early release time to attend the professional development workshops facilitated by their tiered lead teachers. The professional

development topics are influenced by the building and districtwide goals and in part by the superintendent and tiered lead teachers. Current workshops focused on effective diagnostic reading assessments, use of technology, student data, PLDs, and formative and summative assessments. According to one teacher and, as noted earlier in this report, little time was devoted to topics such as classroom management or classroom observation³ because the goals of these professional development workshops was to “enhance collaboration” among teachers and to provide “another opportunity to use quality time [to] develop teacher leaders that can talk about the instructional core of what the students needs [are], what the teacher needs [are,] and what the curriculum is.” According to 3 out of 4 administrators, grant funds allowed for the district to systematically sustain what it believed to be important for improving teacher practices and student achievement. To ascertain whether the professional development actually affects student achievement, the district reviews student achievement data collected through statewide examinations such as the Iowa Test of Basic Skills (ITBS) and the Dynamic Indicators of Basic Early Literacy (DIBELS). DIBELS is collected three times a year—fall, winter, and spring—and is used, according to one elementary principal, to “gauge whether our students are learning reading and mathematics—we do reading and mathematics for first through fifth grade...[and] we do reading, mathematics, and writing for third through fifth grade.”

Developing Performance-Level Descriptors and Essential Learnings

As noted in the theory of action (see Figure H1), improving student achievement is considered the main objective of the MOC–Floyd Valley pay-for-performance pilot program. The pay-for-performance program also, however, is designed to help improve the curriculum and instructional quality of teachers by encouraging all teachers⁴ within the district to identify and document where their students are performing and where they need to improve through the use of PLDs. To clarify, PLDs are one of several ways by which the district hopes to better assess and improve student achievement. PLDs are divided into four learning levels—“emerging,” “developing,” “proficient,” and “beyond proficient.” Developing any specific PLD, according to one teacher has the following purpose:

Any teacher...or parent...would be able to go into a curriculum, and understand what is supposed to be taught, and what is supposed to be learned...[basically] what do we want our students to know...[at] baseline and above so that we would be able to say this student performs at adequate level.

The other methods for improving student achievement is the use and development of Essential Learnings—what a student should know at the end of a course—and the use of formative assessments via SMART goals. According to district administrators and teachers, the Essential

³ It should be noted that the district currently works in partnership with the local area education agency to provide four all-day mentoring support trainings to new teachers. This support is separate from the pay-for-performance pilot program. According to one district administrator, a mentor is provided to each new staff member to work with him or her on issues related to the school building (such as paperwork or grading). The area education agency provides instruction and guidance on the development of a portfolio, which is required of all teachers in the state.

⁴ According to the district administration, noncore subject teachers such as physical education, music, and special education teachers are also required to complete PLDs within the district. They are not, however, mandated to use any formative assessments with their students.

Learnings, which are also known as course objectives, are based on curriculum and are the “core concepts of what a student will learn in your class in order to be proficient.” Each grade level is required to establish Essential Learning objectives for each content area. Most of the schools within the district have established approximately 10 to 15 core concepts for each content area and grade level. Having a standards report at the elementary school level has assisted teachers in identifying their Essential Learnings. As one teacher notes about the positive outcomes from the development of the PLDs and Essential Learnings, “it just...so clearly defined our curriculum with the student right at the center.”

Pay-for-Performance Program Incentives and Pay Structure

The district offered various incentives,⁵ mostly financial, to help compensate teachers for improving their instruction and in turn student outcomes. Teachers could receive compensation in one of two ways: through their involvement in the tiered leader teacher program as well as through writing and attaining their individual SMART goal(s). For example, all teachers—regardless of their involvement in the tiered leader teacher program—received a small payment of \$730 in the spring for writing and meeting their SMART goal at the end of the year. As noted earlier, teachers who took part in the tiered leader teacher program were paid \$2,500 in August of each year. At the end of 2009, 80 percent ($n = 83$) of the district’s teachers met their SMART goals. Only two teachers districtwide opted out of writing a goal.

Strengths of the MOC–Floyd Valley Pilot Program

As a way to assess the strength of the MOC–Floyd Valley pay-for-performance program, the evaluation team asked respondents to identify specific elements that positively affected or resulted from the implementation of this program. A summary of some of these factors—which include greater leadership engagement, communication with stakeholders (e.g., teachers, parents, community, etc.), teacher collaboration, and change in district culture—are further discussed later in this report.

Administrative Leadership and Engagement

All teachers interviewed agreed that the most integral key to the success of the MOC–Floyd Valley pay-for-performance program was the leadership and direction provided by the superintendent. All administrators and teachers interviewed noted that the pilot would not have been successful without the support and consensus-building skills of the superintendent. Two of the skills mentioned were frequent communication with teachers and convening districtwide meetings. As one teacher who was a part of the initial planning phase states, “Because it’s a value to him [the superintendent] and the staff sees him involved and spending time with it. I

⁵ Another form of compensation offered by the district and identified by teachers was time or the availability to work and participate in professional development workshops. The district does offer teachers an opportunity to make extra money through “extracurricular duty pay,” which consists of teachers taking on additional duties and responsibilities such as becoming a football, cheerleading, or speech coach. These extra-duty activities are not a component of the larger pilot program. According to one administrator, coaching salaries are based on years of experience. The district also has a curriculum specialist in each content area who receives an additional stipend for playing that role.

think it brings credibility to the whole staff and this viable curriculum will make a difference [to] people.”

Likewise, when asked to describe the level of leadership support provided by their principals, most teachers interviewed stated that their respective principals had been very involved in the grade-level team meetings and made themselves available to the staff for any questions about the program. They all noted that although their principals were present and engaged for the majority of the teacher meetings, they often let the teachers lead and take ownership of the discussion and next steps.

Communication With Stakeholders

During the planning phase of the pilot program, the district convened several groups of individuals in order to obtain support, feedback, and guidance before the implementation phase of the program began. A 12-member district planning committee composed of unionized teachers from each of the four schools was consulted monthly at the start of the grant to discuss any possible violations of the teachers’ master contract and to use the union teachers as vehicles for spreading information about the pilot to their colleagues. The superintendent convened the administrative team made up of the three elementary, middle, and high school principals twice a month. Members of this administrative team were tasked with meeting with the committee of teachers to discuss the vision and design of the pilot program and determine the feasibility of implementation.

To inform the teachers, principals, parents, and the rest of the community about the program, the district disseminated information through the local district newspaper, board meeting notes, and mailings home. Teachers were informed about current and ongoing initiatives related to the pay-for-performance project through three main mediums: the superintendent, school principals, and members of the tiered leader teacher program. To inform the parents and community members about the program, the district decided to provide them only information about the larger goals of the pilot such as the development of the PLDs for content areas and the district’s desire to provide better professional development to its teachers rather than information about specifics of the pay-for-performance pilot. This approach was taken because, as one administrator noted, this is a –pilot and we were researching best practices in the area of assessment with nothing definitive...no final result.” If results from the pilot are positive, however, the district plans to report the findings at a future board meeting and publish an announcement in the local paper.

Increase in Teacher Collaboration

The district and building administrators encouraged teachers to collaborate, especially within specific grade levels or subject areas. One administrator notes that teachers within their building are required to meet every six days for grade-level team meetings at which they discuss curriculum and student issues. According to another interviewee, the district supports teacher participation in professional development through the use of professional learning communities that have arisen from the pilot program.

Change in Culture Within the District and at the Building Level

All administrators and teachers who were interviewed—including individuals who did not participate in the planning or early implementation phase of the pay-for-performance program— noted that they did not hear or receive a lot of resistance from the rest of the teaching staff with regard to implementing the pilot. This can be attributed to the district administration involving teachers early on and in every stage of planning. According to several interviewees, that veteran teachers took the lead in presenting the pilot to their peers rather than the administration taking the lead. As one veteran teacher notes about the process,

We did not have the resistance that we do with other things because to be honest with you, it was not presented by our principal or somebody in the administration. I think it's very important that it was presented by the teachers that were doing it...we understand the time commitment that it took, the time commitment you have with just your classroom...so we were able to give them some goals that were manageable...I think once the teachers got started doing it, they did see the value in what was happening and how it was going to help them in their classroom.

From the perspective of interview respondents, these results were successful outcomes of the program that directly benefited the district. This is because, according to one interviewee, ~~it~~ forced [us] to focus on creating a common language within the K–12 education community by bringing all the stakeholders to the table and encouraging [us] to have the difficult conversations around how best to assess the needs of [our] students.”

Challenges of the MOC–Floyd Valley Pilot Program

When participants were asked to identify the biggest challenges and barriers within the program, the top two mentioned were time and the lack of training provided to administrators to help establish SMART goals. Two administrators noted that they wished they had received more formal guidance or training on how to assist teachers in writing their SMART goals. For example, one administrator notes the following:

I'm still disappointed in some of the clarity of the [SMART] goals, you know, and I think...I'd be a lot better at the ones we used this year...we wanted to get some training in SMART goals as an administrative group. There were some professional development opportunities...that I wanted to see get paid throughout the grant which didn't.

Notwithstanding, two tiered leader teachers who were interviewed stated that although they had resources available, they would have liked more time besides the 10 paid days during the summer to refine the PLDs and assess the success of the program implementation. The next logical progression and discussion for the district, from the perspective of one administrator, is to ~~assess~~ assess our assessments...do our formative assessments really align to our Essential Learnings?...What are they *really* telling us?”

Moreover, when asked to identify resources they wished they had more of, the top two mentioned were more access to other types of effective formative assessments and the ability to communicate with other school districts in the state that might be doing similar pilots. Currently, teachers are able to use their own formative assessments that may or may not be proven

effective. A third resource that was requested was the incorporation of technology to assist with the formative assessment data-collection activities.

Recommendations for Scaled Implementation and Lessons Learned

The feasibility of whole or parts of the MOC–Floyd Valley pay-for-performance program to be scaled up and modeled at other districts throughout Iowa is integral to this evaluation. All participants interviewed stated that their model could easily be scaled up to larger districts throughout the state such as Des Moines Public Schools if they took note of their recommendations and lessons learned. Examples of these recommendations and lessons learned from their first year of implementation follow.

Buy-In and Consensus From the Administration and Staff Is Critical. Having the support and commitment from the superintendent through building-level staff is crucial during both the initial planning and implementation phases. More important to successfully implementing the program is a clear vision and theory of action. As one teacher notes that “it requires commitment...if you have a good group of core teachers and you have an administration that believes in it and believes in developing tools to help students...we had the staff that was invested.”

Revise What You Already Have. Do Not Start From Scratch. Administrators note that many districts in the state have some version of a tiered lead teacher program already in place within their district and they should look at refining the program to help inform professional development practices. From the perspective of one principal, “I think the tiered teacher program...probably exists...but it’s allowing that group to plan and actually carry out the professional development that I think is the key.” Nevertheless, administrators and teachers alike note that it will take a lot of time up front during the planning phases.

Frequent Communication and Face-to-Face Interaction Is Important. Clearly delineating roles and responsibilities from the outset is critical for all stakeholders. For example, having active participation between teachers and the superintendent through face-to-face meetings is another way to build credibility of the program and ensure continued momentum moving forward.

Having a Stable Teacher Work Force Is Valuable, but Not Necessary. MOC–Floyd Valley is considered a rural school district with minimal teacher turnover. The ability to retain staff by keeping them engaged and focused was seen by two administrators as a valuable asset to the success of the program. For larger, urban districts where teacher retention is a real issue, components of the MOC–Floyd pay-for-performance program still can be applied to their districts. For example, one interviewee notes, “not all teachers [within our district] were immediately involved planning or tiered lead teacher program, [thus] it allowed for the creat[ion] of some natural leaders within [our] district.” Administrators in other districts also will have to make sure that they are extra diligent in communicating, supporting, and engaging the current staff throughout the entire process.

Having the Necessary Resources Is Important. When asked to identify the resources that were essential in assisting the district to implement its pay-for-performance program, interviewees noted that having the small group of tiered lead teachers as a core group of individuals who were “able to take that information and relay that out to the rest of the teaching staff” was important because it did not feel as though it was using “a top-down approach.” Other resources mentioned were scheduled time for collaboration and professional development and access to the consultants, principals, and a superintendent who were available to help design SMART goals, help identify formative assessments that align with best practices, and give feedback on progress.

Impact of the MOC–Floyd Valley Pay-for-Performance Program and Efforts at Sustainability

The MOC–Floyd Valley pay-for-performance program was designed and implemented with the specific goal of improving student achievement by improving teacher instruction and creating a common language within the K–12 education community. These objectives were achieved through the tiered lead teacher program and the districtwide incorporation of SMART goals and formative assessments and the development of Essential Learnings and PLDs. As a result of all these initiatives, both teachers and administrators found that the program has had several positive outcomes that have directly benefited the district: an increase in teacher collaboration through release time and peer-led professional development; a positive change in culture within the district by involving teachers within each school from the start of implementation process; clearer and more consistent communication with stakeholders at every stage; clearer direction from the administration on how to assess student growth; and improvement in student achievement through the use of formative assessments. Another major benefit of the program is that it has compelled all teachers to have conversations about their curriculum and instruction that they normally would not have. According to one veteran teacher, “it [the pay-for-performance program] has forced us to have conversations about our curriculum and why we teach what we do. These are conversations we never would have had otherwise.... you just don’t have the time to have those conversations during the school year.”

When asked to describe how the MOC–Floyd Valley pilot program will be sustained once funding ends, several teachers and administrators admitted that a specific plan of action had not yet been developed. Many veteran teachers interviewed noted their continued interest and support for the program but worried that, without funding, many classroom teachers would be reluctant to support the program in the future. For example, as one teacher shared,

We feel like we’ve gotten a good start on these ideas and to have the rug pulled out from under us....if it does continue, it would have to probably just [be] part of our professional development every year. But then that’s just another thing that you’re asking teachers to do

Despite the real possibility that funding will not be renewed, administrators within the district are optimistic that they will be able to continue key facets of the program. Still, they have had serious discussions about which components of the program they hope to continue or scale back for next year. Components of the program that will continue regardless of funding are as follows:

- The teacher-led professional development workshops throughout the year

- The summer collaborative work between veteran and mentor teachers
- The ongoing implementation of SMART goals, albeit without the financial incentive

If state funding for the pilot program is replenished, the district hopes to continue to pay teachers to develop and meet their SMART goals and greatly expand the number of classroom teachers who are accepted into the tiered lead teacher program so that within the next few years, all teachers would obtain veteran status. Currently it costs the district approximately \$73,000 to implement the SMART goal component of the program. In the interim, the district has sought to obtain funding from the state to help pay for professional development training to further incorporate their PLDs into the Iowa Core Curriculum.

References

- Iowa Department of Education. (2007). Career ladder and pay-for-performance pilot program. Pilot application. Des Moines, IA: Author.
- MOC–Floyd Valley Community School District. (n.d.). District information [Web page]. Retrieved March 12, 2010, from <http://www.MOC–fv.k12.ia.us/district/index.php>.
- MOC–Floyd Valley Community School District. (n.d.). *2006–07MOC–Floyd Valley district AYP*. Retrieved March 12, 2010, from <http://www.moc-fv.k12.ia.us/district/ayp/aypdistrict.pdf>
- Patton, M. Q. (1997). *Utilization-focused evaluation* (3rd ed.). Thousand Oaks, CA: Sage.
- Weiss, C. H. (1998). *Evaluation* (2nd ed.). Upper Saddle River, NJ: Prentice Hall.

Appendix I

Case Study of the Cedar Rapids Career-Ladder Program

District Overview and Introduction to Case Study

Cedar Rapids Community School District in Cedar Rapids, Iowa, is the second largest school district in the state with approximately 17,000 students and a little more than 1,300 teachers. Most teachers in the district have an average of 14 years of experience (Iowa Department of Education, 2008b). The average total salary for teachers in the school district is fairly high relative to other districts in the state—Cedar Rapids' average teacher salary is \$52,399, and \$49,181 is the average total salary statewide. Interview data for this case study reveals that Cedar Rapids teachers are primarily from within the state and were prepared at Iowa institutions of higher education (e.g., University of Northern Iowa, Iowa State University, and University of Iowa).

Nearly 40 percent of the district's students are eligible for the federal National School Lunch program (Iowa Department of Education, 2008a, 2008b). As to student performance, third-grade mathematics and reading adequate yearly progress (AYP) scores for 2008 are below the state average, seventh-grade mathematics and reading AYP scores for 2008 are similar to the state average, and 11th-grade mathematics and reading AYP scores for 2008 are above (Iowa Department of Education, 2008c). Interviewees for this case study also noted that reading and mathematics are focus content areas for the district.

Cedar Rapids was one of three school districts that submitted a proposal to the state of Iowa in 2007 for funding to design and implement a pay-for-performance or career-ladder program. The three districts received planning grant funds for the 2007–08 school year and were then charged with implementing their programs for the 2008–09 school year. Cedar Rapids chose to design and implement a career-ladder program. As part of the evaluation of those programs, Learning Point Associates conducted a case study of each pilot project. This appendix is the case study of the Cedar Rapids Community School District Career-Ladder pilot project.

Data-Collection Methods

In order to inform this case study, the evaluation team reviewed several district and program documents and conducted seven interviews (in-person and telephone) with district and program staff, including district and association representatives, a principal, a teacher, and one enrichment specialist (the enrichment specialist position is described later). Interview transcripts were transcribed and analyzed according to a case study framework that is in Appendix C. The framework structured the development of the interview protocols for the entire data collection and allowed the evaluators to examine common themes and make comparisons across the three pilot sites. A cross-case analysis of these themes is in the last section of the Findings in this evaluation report.

Program Overview and Goals

According to at least two interviewees for this case study, the district's decision to apply for state funding to implement a career-ladder program was easy. Several interviewees noted that Cedar Rapids is a district that is open to change and often "goes for" opportunities. It is interesting to note that the district already has what they consider an alternative salary schedule, and one interviewee considered this a reflection of the district's willingness to be creative with teacher pay (Cedar Rapids Education Association, 2009). In designing the current salary schedule, the district wanted to do away with salary caps, particularly because they had such an experienced staff. Furthermore, the salary schedule now provides *more* of an incentive for furthering one's education rather than just moving along the salary schedule that is based on years of experience. Efforts to reform the way that teachers are paid in the Cedar Rapids school district have focused on career-ladder or career-advancement models and not on pay-reform efforts that connect compensation to teacher or principal performance. For example, in addition to the revised salary schedule structure, the district also offers incentives to teachers who are National Board Certified. In that case, the district decided to take the career-ladder or career-advancement approach for this most recent pilot project as well.

The initiative to apply for the state funds came from the Cedar Rapids Education Association (CREA), not from the district. The request for proposal from the state to apply for the funds required teacher association "sign-off"—this step was especially easy to achieve as a result of the district association leadership in the effort as well as what one interviewee called the collegial and progressive relationship between the school district and CREA. The primary impetus for applying for the funds (and which became a goal of the pilot program) was to reduce the workload of teachers in elementary schools. Shortly before the state funds became available for pay reform pilot projects, the Cedar Rapids workload taskforce administered a survey that uncovered elementary school teacher workload as one of the most significant negative working conditions in the district. CREA members saw the career-ladder pilot project as a way to address this concern. As previously mentioned, funds that were offered by the state allowed districts to choose whether they wanted to design and implement a pay-for-performance or career-ladder program (or both). According to interviewees, there was no question whether Cedar Rapids would design and implement a career-ladder program rather than a performance-based compensation program. Interviewees mentioned the following as reasons:

—hose career ladder rather than pay-for-performance because of our belief that honoring leadership rather than tying it to student achievement scores...when you can't control student population and you can't control the student, etc., in your classroom...you know, you work with what you have and you take them from where they're at and not being totally concerned about a score that is really hard to achieve for some students."

—I guess it would help more teachers—the money could be spread out a little bit more and help more teachers."

—We were afraid it would pit people against each other, pay-per-performance."

The district and association submitted a proposal in summer 2007 for planning grant funds for the 2007–08 school year and received \$64,936. These funds were used to convene planning meetings, conduct research, and finalize program design. In summer 2008, the district submitted

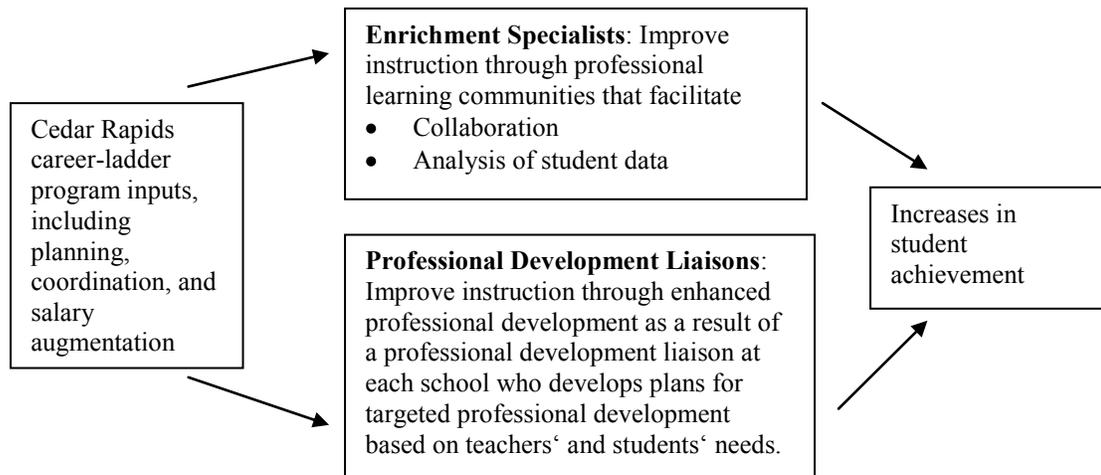
a proposal for \$700,000 in funds to implement the chosen career-ladder program. The proposal states that the district planned to “provide Enrichment Specialists at the elementary level and provide ‘systemic change’ to the departmental chair program at the middle and high school levels” (Cedar Rapids Community School District, June 2, 2008, p. 5). Specifically, the proposed Cedar Rapids Career Ladder Pilot Program to be implemented in the 2008–09 school year included the following components:

- Enrichment specialists at the elementary school level: Master teachers were to be released from their full-time duties for the 2008–09 school year and consistent release time provided to teachers at several participating elementary schools to participate in professional learning communities. Enrichment specialists would receive \$5,000 annual salary augmentation. They were charged with developing curriculum that included program enhancements suggested by the regular classroom teachers, specials programs, or extension programs aligned with the district mission and goals—this allowed released teachers to have to do little to no preparation for their time away from the classroom. Enrichment specialists were also required to develop release-time schedules and nurture relationships with other participating staff.
- Enrichment specialists at the middle and high school levels: The proposal called for positions to be created for current staff members at each middle and high school to become what the district would also call enrichment specialists, although these positions differed from the elementary school enrichment specialist position. Middle and high schools in the Cedar Rapids School District already have department chairs, and the district wanted to use the career-ladder program to put more focus on those positions. These folks were charged with being department chairs and professional learning community leads. Middle and high school enrichment specialists were to receive an annual salary augmentation of \$1,000 per year.
- Professional development liaisons at all levels: The proposal called for the association to appoint a teacher representative at every school in the district to lead the development and roll-out of targeted professional development at their schools. Professional development liaisons were to receive an annual salary augmentation of \$500.

Because of funding restrictions from the state, the district was asked to resubmit their implementation proposal with a lower budget. Cedar Rapids submitted a new proposal with a revised budget of \$449,334. In order to come in at a lower budget amount, the district decreased the number of enrichment specialists at the elementary level from eight to four.

The theory of action driving the design and goals of the district’s career-ladder program is suggested in Figure I1 (developed by Learning Point evaluators):

Figure II. Cedar Rapids Career-Ladder Pilot Program Theory of Action



Application materials submitted by the district for planning grant funds stated the following about pilot program goals: “Looking at salary increases that reflect teachers striving for continual improvement in their skills and their students’ achievement is a natural progression on our path to the District’s vision of Excellence for All” (Cedar Rapids Community School District, July 23, 2007, p. 7). Application materials for implementation funds discussed program goals in more detail: (1) increase student achievement with enhanced and supplemental programming options; and (2) provide time for teams of teachers to work together in collecting and analyzing student achievement data, participating in professional development and establishing curriculum and student goals. An additional goal mentioned by several interviewees but not suggested in the Cedar Rapids proposal materials was to implement a program that would specifically improve working conditions for teachers by offering them collaborative time and additional compensation for their work.

Program Implementation

The state approved the proposal and budget, and the district began implementing the pilot program during the 2008–09 school year. In this section, we will see that, in some ways, program implementation did not occur precisely as described. Partly, this was because in the summer of 2008, the city (along with several other areas along the Iowa River) evacuated nearly 24,000 people from a devastating flood. The flood and its aftermath had numerous implications for the school district, including the closing of some of the schools where the district planned to implement the career-ladder program (Associated Press, 2008).

Implementation of Enrichment Specialists at the Elementary Level

Other than the reduction in the number of elementary-level enrichment specialists from eight to four (from the state’s budget restrictions), this part of the program was implemented according to the program proposal. Four teachers from within the district were recruited to be released from their main teaching assignment for the 2008–09 school year to serve as enrichment specialists. The enrichment specialists developed and delivered curriculum in four of the district’s

elementary schools and provided release-time so that regular elementary school teachers could engage in professional development and professional learning communities with their colleagues. The enrichment specialist positions were posted on the district's human resources Web page, but at least two interviewees said that the four people who ended up taking the positions were more or less hand-picked. At the beginning of the 2008–09 school year, communication about the program took place through regular association meetings and e-mails to teachers as well as through regularly scheduled principal group meetings with district administrators. The four schools that participated in the program and whose teachers were released by the enrichment specialists were as follows:

- Hoover Elementary School—every K–5 teacher
- Kenwood Elementary School—every K–5 teacher and the Level I special education teacher
- Madison Elementary School—every K–5 teacher
- Wilson Elementary School—every K–5 teacher and the instructional coach

The four schools were chosen by the executive director of elementary education and the associate district superintendent. Interviewees reported varying criteria for choosing the schools. For example, one interviewee said that the schools were chosen because of “cohesiveness in the staff” and “opportunity for growth.” Another interviewee said that the schools were chosen because they had lower-income students and a high percentage of students who were eligible for reduced-price lunches.

Implementation of Enrichment Specialists at the Middle and High School Levels

One interviewee noted that there was “less specificity” with the middle and high school pieces and that the district did not make as much progress during the pilot as they would have liked to make at the middle and high school levels. Although the middle school professional learning community leads/department chairs received training and a stipend during the 2008–09 grant implementation year, the high school professional learning community leads/department chairs did not. One interviewee noted that many of the professional learning community leads/department chairs at the high school level do not understand what their position entailed; therefore, the district is engaging in more communication and outreach with these individuals to make the responsibilities clearer. The district's final report to the state about the pilot program states that the high school leads “did not have the same opportunity to work with staff in the buildings as the Middle School Leaders did. We are utilizing their expertise throughout the summer and in 09-10 school year, after sending them to the Minneapolis conference on professional learning communities. Their job will be to fully roll out the professional learning community program at the high school level for 09-10” (Cedar Rapids Community School District, 2009, p.3).

Implementation of Professional Development Liaisons/Leads at All Levels

The final program component—the professional development liaisons—was implemented in all 34 schools across the district as well as in some off-site programs. The district communicated

with staff about this part of the pilot program through regularly scheduled association meetings. It is interesting that these professional development leads were in place prior to the pilot project, but funding from the pilot project allowed the district to enhance their roles in two ways:

1. Provide them with a \$500 stipend for the increase in their responsibilities.
2. Support them with mandatory training focused on their role.

State funding for this pilot project (as well as the other two that operated in the state during the 2008–09 school year) was not renewed. Therefore, the Cedar Rapids school district ended the enrichment specialist part of the program at the elementary level. The four enrichment specialists were placed back into classrooms for the 2009–10 school year. None of the four enrichment specialists is in the classroom where she or he was teaching prior to becoming an enrichment specialist during the 2008–09 school year. Financial sustainability is a recurring problem for alternative compensation programs across the country and proved also to be for the scale-up and sustainability of this program. Two interviewees stated that the association offered a plan to the district for how to continue the elementary-level enrichment specialist program by repurposing yearly state-level teacher quality funds, but the district declined to continue this part of the program nevertheless. At the time of data collection, several interviewees mentioned that the district and association are planning to continue the department chair/professional learning community lead position at the middle and high school levels as well as the professional development liaison position at every school in the district.

Program Outcomes, Strengths and Weaknesses, and Facilitators and Barriers for Scaled Implementation

Program Outcomes

When asked about whether interviewees thought that the Cedar Rapids Career Ladder program achieved its goals or intended outcomes, responses varied. Several interviewees mentioned that although improving student achievement was clearly the primary intended outcome, they thought that it would be difficult to see results after one year of implementation. For example, one interviewee said, “I don’t think we had the time to really see that as well as we could have.” Several interviewees had positive responses about the indirect goal of improving instruction through professional learning communities. “Teachers love the collaboration time” said one interviewee. Two interviewees noted, however, that there was little to no ongoing professional development for the released teachers on how to effectively utilize collaborative time, particularly when it came to analyzing student data. The four participating schools were permitted to design their release/collaborative time however they wanted. One of the participating principals noted that the released teachers were instructed to use a form with guiding questions to direct their collaborative time, but that was all the training that they received. It is interesting that one interviewee thought that some of the released teachers enjoyed the release time from a working conditions perspective and less for its ability to improve instruction through collaboration, which seemed secondary.

The extent to which the indirect goal of improving overall instruction through the work of a professional development liaison/lead at each school was met is somewhat tricky to evaluate.

This is partly because this position existed before the program was implemented. The only ~~“treatment”~~ characteristics relating to the professional development lead position as a result of the program were that professional development leads started receiving stipends for their work and they were required to participate in training. One interviewee even commented that she ~~“forgot[s]”~~ what it is sometimes because I think of the enrichment specialists as the career ladder.” Several interviewees commented that the outcome of the professional development lead position was primarily that the folks in these positions now had a ~~“voice”~~ and that they were being compensated for extra work that they were already doing. In other words, the professional development leads were now explicitly responsible for submitting the schools’ professional development goals each year and these goals were to be a direct reflection of what the teachers at the school wanted or needed to be doing.

Strengths and Weaknesses

Definite patterns emerged. The elementary-level enrichment specialist component of the design was viewed as the primary strength by several interviewees. Interviewees mentioned that this feature allowed for teachers to benefit from release and collaboration time and have their classrooms filled with teachers they trusted who could maintain the necessary instructional focus. The main weakness of the program, suggested by at least two interviewees, was that not all schools or teachers were eligible to participate. For example, some of the special education staff at participating schools were frustrated that they were not eligible to participate in the release and collaboration time. Furthermore, one interviewee noted that when some teachers from nonparticipating elementary schools would hear about the program, they would want to know why their schools were not participating. District staff primarily responded by mentioning that the program was a pilot. Again, at least two interviewees noted that the lack of professional development opportunities for those engaged in the collaboration time was a program weakness.

Facilitators for and Barriers to Scaled Implementation

In an effort to understand how a program like Cedar Rapids’ could be scaled up or implemented in other districts, interviewees were asked to discuss facilitators for and barriers to program implementation. Several of the facilitators mentioned might hold true for any program design, including the need for consistent and unwavering support from the union and the administration; the importance of starting small with program implementation and then scaling up once the kinks were worked out; and making sure that the planning team had adequate and broad representation and that the group is not too large—some interviewees thought the Cedar Rapids planning group size of 20 people was already too large. Two other facilitators mentioned by interviewees were more reflective of the specific design of Cedar Rapids’ program. Several interviewees noted that a facilitator of the Cedar Rapids program was the fact that it addressed a specific need that had been identified in the district—teacher workload and the need to have time to collaborate. The design of the program was specific to this need and that is why Cedar Rapids chose a career-ladder program and not a pay-for-performance program, which they perceived would induce unnecessary competition in schools. Furthermore, the planning team thought it would be easier to ~~“sell”~~ a program of this design to teachers in the Cedar Rapids district. In addition, at least two interviewees noted that when implementing a program like the one in Cedar Rapids, it is important to choose school sites where the staff size is manageable (one interviewee said that

—You wouldn't want to pick a school that was really big because that would be much harder to get everyone their time and stuff”) and where there is already some sort of a collaborative atmosphere in place.

Interviewees suggested three primary barriers to the successful implementation of Cedar Rapids' career-ladder program. Several interviewees mentioned that it would be complicated to implement the program without state funding. One interviewee noted specifically that compensation for teachers' time outside contract hours can often be cost-prohibitive. Just as was mentioned earlier as a facilitator to the design and implementation of any pay reform program, district-level leadership support ended up as a perceived barrier to Cedar Rapids' program according to some interviewees. Many of the interviewees felt they did not have necessary broad support and in the end, that the lack of support caused problems for the overall sustainability of the program. Last, one interviewee mentioned that the teachers engaging in collaborative time were using summative assessment data to drive discussions about students and instructional improvement when they should have been using formative assessment data.

References

- Associated Press. (2008, June 15). Hundreds ordered to flee homes in Iowa City. MSNBC. Retrieved March 20, 2010, from <http://www.msnbc.msn.com/id/25020185/>.
- Cedar Rapids Community School District. (2009, June 29). *Cedar Rapids Community School District career ladder pilot program: Final report 6/29/09*. Cedar Rapids, IA: Author.
- Cedar Rapids Education Association. (2009). CREA 2009–2010 salary schedule. Cedar Rapids, IA: Author. Retrieved March 20, 2010, from http://www.cr.k12.ia.us/DistrictResources/Public/Human%20Resources/StaffServices/empAgreements/Documents/2009_10/09-10%20CREA%20Integrated%20Salary%20Schedule.pdf.
- Iowa Department of Education, Bureau of Planning, Research, and Evaluation. (2008a). 2008 adequate yearly progress (AYP) in reading by school district. (Data file). Des Moines: Author. Retrieved March 20, 2010, from http://www.iowa.gov/educate/index.php?option=com_docman&task=cat_view&gid=519&Itemid=1563
- Iowa Department of Education, Bureau of Planning, Research, and Evaluation. (2008b). 2008 adequate yearly progress (AYP) in math by school district. (Data file). Des Moines: Author. Retrieved March 20, 2010, from http://www.iowa.gov/educate/index.php?option=com_docman&task=cat_view&gid=519&Itemid=1563
- Iowa Department of Education, Bureau of Planning, Research, Development, and Evaluation. (2008c). Basic educational data survey, staff file, 2008–2009 public school and AEA teacher information. (Data file). Des Moines: Author. Retrieved March 20, 2010, from http://www.iowa.gov/educate/index.php?option=com_docman&task=cat_view&gid=95&Itemid=1563